

BUSINESS HORIZONS

SUMMER, 1961

VOL. 4

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NEED WE FEAR JAPANESE COMPETITION?

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NEW FORMS OF MANUFACTURING COMPETITION

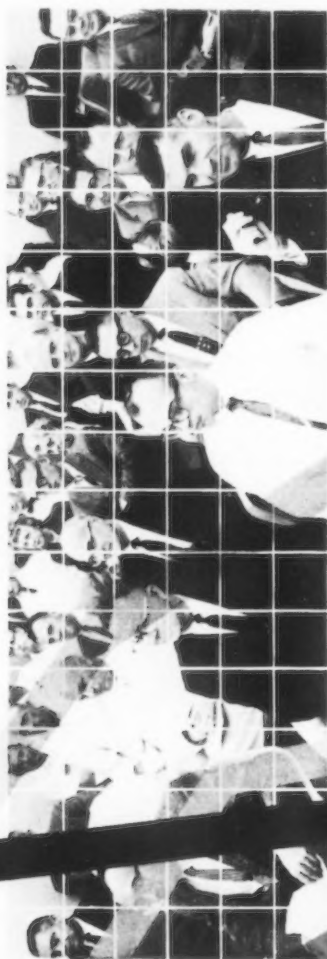
John Parkany

WANTED: INNOVATIONS IN PRICING OF SERVICES

Charles M. Hewitt and James M. Patterson

CASE STUDY: DILEMMA OF THE INDEPENDENT DAIRY

Comment by Albert Haring



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Administration in a Goldfish Bowl

Businessmen have been accused, at times, of making criticism of government a favorite indoor sport. Here is a reply to that criticism and, along with it, an intimate first-hand view of the public servant's position. Public administration, a prominent state governor tells us, often has some similarity to conducting affairs in a goldfish bowl with several million people looking over your shoulder. 23

Need We Fear Japanese Competition?

Japanese competition is, in some instances, regarded as a threat to our economic health, despite the fact that we sell more to Japan than we buy, and trade less with her than with a number of other countries. While some of our industries face hard competition from Japanese products, Japan is not an invincible competitor and there are powerful reasons, in the American interest, for encouraging Japanese trade. 27

about the

AUTHOR

ARTICLE

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As a consultant to business organizations in the U.S. and abroad, Mr. Peterson became interested in the essential role of the entrepreneur in industrial development. Before assuming an entrepreneurial role himself—as an independent consultant—he was Director of Industrial Development for W. R. Grace and Company.

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A Tonic for Enterprise

The entrepreneur is supposed to have a primary role in the private enterprise tradition. Has it been submerged in the rise of massive, intricately controlled organizations? If entrepreneurship is fading from our economic life, the loss may be greater than is generally recognized. Perhaps the survival of our system depends upon maintaining either the entrepreneurial function or an effective substitute. 35

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In a varied career in business (he is a certified public accountant) and teaching, Mr. Lane has had a lifelong interest in transportation. Now that his study of Soviet railroads is completed, he plans to return to teaching transportation.

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Where Is Soviet Transportation Heading?

In striking contrast with the United States, the Soviet Union's rail network carries over 80 per cent of the nation's freight. The reasons for this do not lie in an antiquated Soviet transport system (Russian railroads support the highest average traffic density in the world), but in the differing structure and objectives of the U.S. and Soviet economies. 61

Employment Problems in a Changing Economy

A growing U.S. population presages some serious labor force problems in the 1960's and after. Not only is the labor force expanding, but its composition is shifting rapidly. How many useful jobs can be found, how much unemployment will we tolerate? Can we afford to have an almost totally unplanned labor market? 71

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Under pressures of increasing costs, technological advance, and economic growth, business is developing forms of competition that are "profit conscious" but more complex than short-run profit maximization. These new strategies may not appear as aggressive as traditional textbook examples, but they produce a workable competition with important economic benefits. 85

Wanted: Innovations in Pricing of Services

The marked shift in our consumption patterns toward increased spending on services is receiving less attention than it deserves. This shift contributes to our problems with creeping inflation and may impede the growth of aggregate demand. As services become a larger part of the economy, some questions arise: Should public policy be revised? What are the alternatives? 93

Case Study: Dilemma of the Independent Dairy

Cassner Dairy, an established operation with experienced management, has serious market troubles that are not of its own making. The company's market position is deteriorating and all routes to a profitable solution appear to be blocked. After weighing several possible courses of action our commentator proposes a novel solution to the company's problems. 51

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profiles of the future

THE INFORMATION DEPARTMENT:

A NEW UNIT IN CORPORATE ORGANIZATION

by John E. Connor

FIRST-YEAR textbooks in economics list the many advantages of large corporate size—division of labor, better management, lower investment per unit of output, and so forth. A major disadvantage of corporate size is, however, its unmanageability. The cost of communications among larger and larger groups of people, who are occupied with increasingly diverse tasks, becomes considerable. Everyone knows several funny stories illustrating the clumsiness of bureaucracy. Published material dealing with the problem ranges from the cartoon presentations of trivial aspects of bureaucracy to expressions of serious concern with the impact of the "organization man" on his society.

Decentralization, a major post-war development in business practice, is largely an effort to gain the advantages of scale while maintaining the personal touch and the flexibility of small business. It has had considerable success—but it is not the complete answer. Successful enterprises refuse to stand still. As the operations that are the basis of decentralization change, ambiguity increases and the cost of communications rises again. Finally another reorganization—al-

ways costly if worth while—is necessary.

In his book, *America's Next Twenty Years*, Peter Drucker makes this comment: "Finally, the need is for effective innovation in the management of workers and in the organization of work; despite the progress in this area, it may well be the most backward sphere [of private corporate enterprise], and the one with the greatest potential for increased productivity."¹ This article suggests a solution to this problem—one that recognizes more fundamental principles of corporate endeavor than does decentralization. It is suggested that corporations have never recognized the process that underlies their white-collar work, despite the active interest they have had for some years in the process underlying blue-collar work. It is not anticipated that the proposals to be suggested will usher in an organizational utopia, but an increase in productivity in the entire corporation and a substantial improvement in morale among the professional echelons should result. Three interlocking changes in the corporate structure are involved:

1 All nonexempt (nonprofessional) office work should be organized

¹ Peter F. Drucker, *America's Next Twenty Years* (New York: Harper & Brothers, 1957), p. 16.

Mr. Connor is Manager, Data Processing, Curtiss-Wright Corporation.



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in a single department, which will here be called the Information department.

2 Staff services should be requested by the person who needs the services; they should never be suggested for him by someone else.

3 The responsibility of the manager is to know when he needs staff advice; the responsibility of the staff professional is to give good advice.

No polls are needed to prove that the average businessman looks upon office work as unproductive. The image of the "worker" is still the wage earner, praised in the cost accounting records as "productive" labor. All other employees are "a burden," "an overhead expense," and "red tape" or even "nonproductive" labor. Yet few people, if asked to think about it, believe that the high standard of American living and the enormous productivity of our enterprises result because these "workers" work harder. Everyone agrees that planning and ingenuity, not physical labor, are at the root of our success. Most will agree further that planning is done in offices and that someone in an office has really been responsible for our productivity.

Closely allied to the feeling that office work is unproductive is the judgment that much staff work is boondoggling. Many staff services have become so specialized that top management is no longer equipped — or, at least, does not feel equipped — to make judgments about them. Each trade has its own jargon, which is no longer the special province of the legal department. All are becoming increasingly well trained in presenting their ideas with force and impact, making it still more difficult to judge the worth of these ideas.

However forcefully an idea is

presented to top management, the idea will meet multiple difficulties as its implementation is sought. Top management has long recognized line-staff friction as an important inertial drag on the effectiveness of the organization. (Douglas McGregor of MIT is perhaps the best known of the many who have addressed themselves to this problem.) Despite the forcefulness with which staff proposals are made and the efforts to sell them to line organizations, there remains a substantial body of unimplemented but thoroughly accepted theory devised for the improvement of enterprise. As one example, information technology—with all that it implies in computer systems, information theory, statistics, and radical changes in clerical work—is rarely implemented at more than a fraction of its potential.

THE PROBLEM DESCRIBED

This proposal for reorganization is more easily evaluated if we make four assumptions about business enterprises. *First*, the difference between mechanization in factories and mechanization in offices does not lie in the extent of the mechanization, but in the postulates made about organization of work and the purpose of mechanization. Factory work is product or process oriented. Office work is skill oriented. *Second*, conflicting statements made by corporate management about the responsibility of line and staff lead to wasteful competition between the two.

Third, management misunderstands and misuses help, and *fourth*, office workers are not necessarily resistant to change. But they do resist using a different method in their work when they do not have the knowledge and

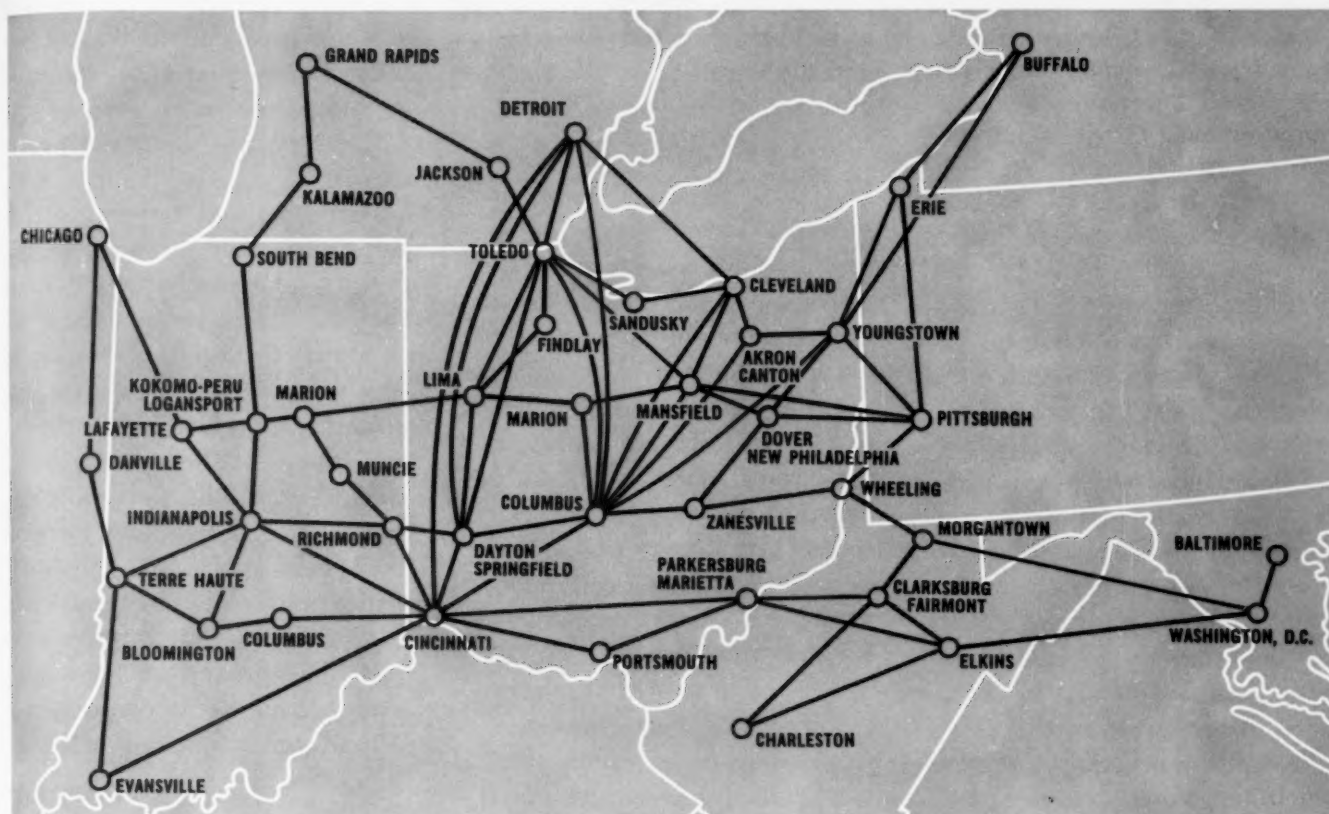
technical skill to understand all the implications of the method. They can also resist a change if there is a likelihood that not having suggested the change themselves will be perceived as a failure.

Lawyers are the staff employees with the most unchallenged claim to professionalism. Systems analysts, especially when they come computerized, are the staff employees who bring problems of change into sharpest focus. Therefore, lawyers and systems analysts will be used as examples in the following discussion, although all staff employees present, to some degree, the same kinds of problems.

Process Versus Skill Orientation

In the nineteenth century the objective in using machinery was to replace human power and skill with mechanical power and skill. Work was organized as it had always been, but power tools replaced the more routine functions of craftsmen. Machines replaced handsaws and drills, but the organization of work remained skill oriented.

Mass production brought a major change in concept; the essence of this change is often misunderstood. The factory floor layout no longer grouped all milling machines in one area and all drill presses in another. Rather, the machines were organized around the product to be manufactured. Work flow was no longer dependent upon machine layout; instead, machine layout became dependent upon work flow. Nor was this change in concept limited to machine layout. The organization of workers (including typists and executives) reflected their product orientation. The CIO was a recognition by labor of a trend away from craft



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organization. This was a fundamental social change; work had been skill oriented since the founding of cities several millenia before Christ.

More recently there has been another change; some industries have become process oriented. Mass production in 1960 is misunderstood if it is taken as the making of thousands of identical products. Few automobiles, for example, are identical. One blue car may have white-wall tires, but the next blue one does not. Custom-ordered cars can be mass produced; the product varies because different parts are chosen in the assembly process. Likewise, there are dozens of exceptions to each rule in the office, although the processes are often much the same. These should not be viewed as inefficiencies; such a view is substantially the same as believing that mass production for cars will work only if they are all black, an idea that was abandoned in the automobile industry over thirty years ago.

Today, the mechanization of office work is still largely skill oriented; machines substitute a mechanical skill for a human one. The layout of offices is as unchanged by office mechanization as the layout of factories once was, and there has been little effect on the management of workers. Integrated data processing is an effort to get away from this skill orientation, and to move at least toward product orientation. We do find organizations of work adapted to the efficient production of paycheck and payroll registers. Thorough reorganization of work and of corporate structure in accord with the paper-work process is, however, unknown to the author. Offices are usually skill oriented, occasional-

ly product oriented, but always decades out of date.

Line Versus Staff

Law and medicine have been recognized professions for centuries. Now, efforts are being made to professionalize business. One of these efforts has been the encouragement of a broad view of a staff assignment. Each staff employee is encouraged to take the whole corporation as his province, to "think big"; yet responsibility for corporate functions has already been divided among the line organizations. If the staff man "thinking big" happens to be in industrial relations, his new idea may concern the way a line organization should handle its wage earners. However, someone in the line organization may feel that he can properly handle relations with his own wage earners. Any improvement he himself devises is easily accepted since it results from self-criticism. However constructive, suggestions from the staff employee do not have the advantage of being self-criticism and consequently are often less readily accepted. Perhaps the most important failure in the allocation of human resources is this conflicting responsibility for corporate functions. In effect, management frequently assigns two persons to the same task, not as a team but as opponents.

Help—A Misunderstood Word

This duplication of assignment and other similar errors arise from a misunderstanding of the word "help." If a drowning man cries for help, there is no misunderstanding his intent. Moreover, he is as cooperative as he has the wit to be during the rescue operation.

Help proffered by management is not nearly so well accepted. The reasons for this are elementary, but many managers choose to ignore them. Help must be wanted by the person helped. No matter how carefully the ground is prepared, help that is offered carries with it the connotation of criticism. No manager suggests help for one of his subordinates when he is satisfied with the subordinate's performance. We should not conclude that line organizations do not need help, nor that corporate management should not provide staff to supply it. But we can question whether we have correctly organized our corporations so that help can be requested by those who use it.

Resistance to Technology

When the United Nations attempted to increase the agricultural productivity of primitive communities, tractors, hybrid corn, and trained agriculturalists were of little help. The value of tractors, hybrid corn, and trained agriculturalists is undisputed, but their practical application in Afghanistan was a failure. The problem was not a technical one, but a political and social one. Farmers in primitive communities have deep commitments to traditional practices; to such farmers, efficiency and progress do not represent an incentive to change. No one has yet solved the human problem of relating modern techniques to people steeped in other traditions, so that they are willing to use them. Indeed, most countries with this problem no longer rely on improved communications with present farmers as a solution, but, instead, rely on educating a new generation of farmers.

It is foolish to suppose that



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farmers in Afghanistan do not want a change. They are ill-fed, dirty, plagued by disease, and they live without amenities. But they have learned with good reason to distrust outsiders. They have no technological knowledge whatsoever and no way to judge whether the tractor will do something for them or whether it is another trick by the rich to abuse them further. Educating them so that they will have the necessary knowledge is itself an innovation often met with suspicion.

Counterparts of all these problems exist in business, and, without an analogy like this one, it is difficult to indicate their extent. Clerical supervisors are sent to computer schools to learn about programming, and it is assumed that they receive the necessary knowledge to make judgments about the changes involved. But the knowledge needed is usually not knowledge about computers. Perhaps the work their group has been doing will not be programmed but, rather, will no longer be necessary. The supervisors believe that their contribution to the company lies in their encyclopedic knowledge of this work, the great quantity of it their work groups do, the high quality of the output; they are disturbed to see their approach to this work superseded. The knowledge that is needed for a different view of their contribution is not offered in programming schools.

It is suggested that, despite all the talk about the high cost of offices, few steps have been taken to bring in better people to manage them. Clerical supervisors are usually selected from among clerks at the summit of their careers. They have deep human commitments to things as they are. They do not reject change;

typically, they are ingenious at finding better ways to do things. But they do reject a change in the way changes are made. In general, everyone wishes to minimize change that he does not understand or originate. Given a choice and no real competence to understand the effects of the choice, the understandable human reaction is to resist making the choice.

A manufacturer of office equipment has devised a plan, formidably broad in scope, for integrated control of a large part of a corporate enterprise. In persuading customers to adopt this system, they have yet to encounter a technical objection. No one has found fault with the logic they propose or the mathematics supporting the techniques. Several potential customers already have the required equipment and would encounter little or no expense in adding the suggested application. Basically, the plan requires that manufacturing data and accounting data be considered "business" data and used by a common work force to accomplish "manufacturing" and "accounting" jobs. Traditional reports are unnecessary. Accounting functions are abandoned. Control data, previously calculated by a work force maintained by manufacturing, are irrelevant.

Present corporate organizations praise the proposed system highly—for use by others whose problems are felt to be less urgent or less complicated. There are even sighs of regret that such a splendid system will not meet this corporation's peculiar requirements. The proposed system can be compared to the tractor in the primitive agricultural village in Afghanistan. When the agricultural agent arrives with the tractor, he

does not meet a resistance to change; he meets a reaction against a leap into the dark. However ignorant the villagers may appear, they are probably making a wise choice in the context of their technological comprehension. Perhaps clerical supervisors are also wise.

Clerical supervisors are not the only office workers who do not have the background for evaluating such sweeping changes in office work as some information technologists are proposing. At higher levels in staff departments are college graduates of twenty and thirty years ago, who were trained at a time when the goals of college business curricula were entirely different from today's goals. No course in statistics was included; more important, the *Zeitgeist* out of which the curricula were devised was different. These men have grown just as accustomed to things as they are as the lower level clerical supervisor.

My most interesting personal experience in this connection has been with encouraging systems analysts to use different systems. No systems analyst or computer programmer writes instructions for a computer to use directly in the code the computer "understands." Rather, he writes in a code easier for him; a computer program translates what he has written into the computer code.

These translating programs, called assemblies, have been made increasingly powerful. Less and less needs to be written down by the programmer. I have had the experience of having a systems analyst tell me in the morning, vociferously and at great length, of the resistance to change in our accounting office, and then, in the afternoon of the same day, give me all the reasons

why the newest assembly program was not useful to him. This analyst had been extremely busy and had had no time to get to the classes to learn the new system. Because he was both fast and meticulous, he had been good at programming and may have viewed the new system as eliminating an area where he had excelled.

The moral of this little tale rests in its epilogue. The indicated change was finally made willingly. The analyst did not have the specific knowledge needed to accept the change immediately, but, with his background, this was easily acquired.

These then are the assumptions upon which my proposal is based: Office work is still basically skill oriented even though there is some percentage of mechanization; help and change are misunderstood in practice. If these assumptions are perceptive and relevant, then corporations are presently organized to aggravate their conflict potential. They can, however, be organized to mitigate this conflict.

INFORMATION DEPARTMENT

It is essential that all nonexempt office workers be grouped in a single department, that the function of this department be recognized as information processing, and that the organization of this department be in accord with the actual pattern of work and without any reference to traditional titles and work groups. The point has been made that the process orientation of factory work requires not only the rearrangement of machines or equipment so that the process flow is facilitated, but also reorientation of the entire organiza-

tion structure in accord with requirements of the process.

Even the terms used to describe jobs and to name work groups must be process oriented. The process must become a natural part of the structure. We need to discover what the process is, lay out our offices around this process, and organize our office forces around it. We do not bring machines into accounts payable; we question whether the accounts payable section is really part of the pattern of office work or an artificial barrier we have constructed that impedes the flow of work.

The Exempt and Nonexempt

The first distinction that will result from an analysis of present organization is the distinction between exempt and nonexempt

office work. We will see that the present corporate structure is based entirely upon differences in professional (exempt) work. Yet the great bulk of the work done is not professional; it is information processing by nonexempt people and their supervisors. The use of professional differences to organize this work is not only irrelevant, it precludes process orientation. Worse, although we have been calling offices skill oriented, the nonexempt work forces are actually organized on the basis of skills that professionals have; such an organization does not apply at all to nonexempt work. The clerical work in accounts receivable does not differ in any important way from the clerical work in personnel statistics. The separation exists because accounting is different from industrial relations. The



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organization of work groups within this new department and job descriptions, as well as the mechanization and systemization of this work, must be process oriented.

Organization: Process-Oriented

The only staff functions that will exist in this new corporation will be professional advisory functions. All the clerks we usually find in a controller's office will be part of the nonexempt department, the Information department. There may be an accounts receivable function in the controller's office, but its chief responsibility will be to make good decisions in unusual situations. It will also devise some system which ensures that the Information department does cull out the unusual situations and supply adequate intelligence about them as a basis for sound decisions. The controller will have no responsibility for processing the nonexempt workload in accounts receivable.

Separate records of the same data will not be kept by the treasurer (for payroll purposes), by accounting (for costing), by manufacturing (for operations control), and by employee relations. Professionals having the responsibility for these functions will ensure that adequate intelligence is supplied for the decisions they are asked to formulate in each area. But processing the information and deriving its content of intelligence will be a function only of the Information department. They, on the other hand, will have no responsibility for any decisions except those that relate to processing information more efficiently and producing intelligence more effectively.

In such an Information department, work can be organized in

accord with its pattern, and a single work group will handle all the information associated with pay, whether this information is needed by professional accountants, by engineers, by the industrial relations staff, or by the treasurer. When the distinction is made between professional and nonexempt work and all of the latter is handled by a single department, there will be no basis for suggesting that all the clerical work associated with these functions must be carried out by separate work groups using four separate copies of the same information.

The productivity of American factory technology is not a result of robotizing jobs. There are factory jobs that are routine, lacking in responsibility, and dull, but these are not concomitants of mechanization; they are often caused by a misunderstanding of its power. This productivity does originate in the concept of organizing work in accord with its underlying pattern. This is the principle that should be used in the nonexempt department; good supervision there could both create jobs with more content for the responsible nonexempt employee and mechanize the routine jobs no one wants.

For example, a storehouse with \$4 million worth of construction and maintenance material analyzed its operations and devised a mathematical statement of them, which was programmed for a computer. All transactions were punched into cards and a purchase requisition for an order of parts—among other reports—was generated when the magnetic tape record showed that the reorder point had been reached. Two storehouse clerks were assigned as coordinators for the new system; they had previously

kept track of inventory and calculated, with nomographs, the time and quantity for reorder. Under the new system, the computer program rejected transactions that it was programmed to recognize as incorrect—issues in excess of quantity on hand, price more than 10 per cent different from the last price, and receipts without orders. The analysis of these errors has proved more challenging and interesting than the previous job these two men had. Both were assigned the job after several others had failed at it, and each is paid much more than before. Incidentally, one of the coordinators was sixty when he was selected for the job, and had been originally passed over because he was the oldest of the order clerks and "less adaptable." He received a merit increase in pay at the age of sixty-three because of his excellent performance in his new job and says he enjoys work more than he has in twenty years.

Capable supervisors who can tailor jobs to the talent of the people available should be chosen for the Information department. An example of what can be done in this respect involves five elevator operators in New York City who were dismissed when automatic elevators were installed. A vice-president of the corporation operating the building for the owners was deeply concerned about the five. Three found other jobs as elevator operators because they liked the work, but the other two accepted the vice-president's assistance and found more highly-skilled jobs.

THE NEW STAFF

Even in the largest corporate headquarters, the number of staff people required is quite small if we exclude those who supervise

non-exempt personnel. All the functions of the latter will now be in the Information department, resulting in small, flexible staff groups. The next step is to organize staff services so that they are recognized as helpful and are used aggressively.

Help When Needed

Initially, the only staff services provided will be the professional help top management needs, but there will soon be other demands. Many lower levels of management need legal assistance or advice on industrial relations. There are several ways to meet such demands other than by adding to staff. Most demands will be studied before staff is created, and will have to be repeated before they are honored in any way. This is not to let the drowning man sink (wise management will not even let him get his hair wet) but to be sure that the demands are real, and not, for any of a

complex of reasons, simulated. Real pleas for assistance will be honored immediately.

One way to do this is to assign to the person requesting help a professional who has the knowledge and experience required. As an example, let us assume we have a request from marketing for legal assistance. The person assigned will not function in the marketing department as a lawyer; rather, when a marketing job at an appropriate level becomes available, a lawyer will be promoted into it. His primary function will be to fill the marketing job, but marketing will now have at hand the legal advice it seeks. The lawyer will not give legal advice before anyone recognizes the need for it, but should it come to his attention that legal advice is desirable in a sphere of marketing not his own, he can tactfully suggest the desirability to the right man at the right time.

But his responsibility will not

be limited to having such advice accepted, and it will be easier for him to go back to his own responsibilities in marketing than to try to "sell" unwanted advice. Meanwhile, other marketing managers can seek his advice freely, recognizing their own responsibility to seek advice on time and not concerned with being subtly criticized for poor performance.

In another way, the new corporate structure can provide good staff services without establishing a permanent staff structure. It will continue to hire staff specialists, some directly from colleges, others with varying business experience. These hires will be in accord with recurring requirements. Some of these specialists will make their way into line capacities as the lawyer has in marketing. Thus there will be available, in line capacity throughout the corporation, considerable professional compe-

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tence. One or more of these professionals can be called upon for *ad hoc* staff assignments. If the need is felt for a new policy in salary administration, skilled man power could be assigned to the task, either full time for a temporary period or as a part-time assignment added to regular duties. Professional competence requires continued training and exposure to advances in the profession. *Ad hoc* assignments represent an excellent technique here—supplemented, throughout a professional's career, by staff assignments as the regular job.

Clearer Responsibility

In answer to Drucker's plea for innovation in the management of workers and organization of work, it has been proposed so far that a first step is to work for the process orientation of the office by ending the artificial use of professional work distinctions as a basis for the organization of nonprofessional work and, toward that end, to bring together in a separate department all non-exempt employees. The second step proposed is to set up staff services that will be extended only when they are requested. The third and last part of the proposal is to drop authority as an organizational basis and to substitute responsibility.

Large numbers of nonexempt employees in staff departments generate confusion. Professionals in the department are given many problems that are managerial; persons who are supervising pretend to be or are given professional problems. The usual response has not been to eliminate the confusion but to enlarge the responsibility of professionals. As mentioned previously, each professional is encouraged to "think

big," to consider the whole corporation his province. While there are many personal relationships among line-and-staff employees that allow for such independence in certain areas, it has often led to uneasiness among the managers and frustration among the professionals.

Suppose each manager is to manage the entire function. No staff person would have any responsibility to demonstrate ways in which the management could improve. Rather, the responsibility of staff would be to give good advice when it was requested. It would be the responsibility of management to recognize the need for professional help in time for it to be effective. No manager's boss would ever encourage him to seek professional assistance; he would demand performance and complain about failures to perform.

Professionals would be judged on the worth of their advice. If they gave good advice but it was not accepted, they would have fully discharged their responsibility. If they gave poor advice and the manager accepted it, it would be the professional's responsibility. No rule can be established here. Good advice can be presented so poorly as to reflect adversely, and justifiably so, on the professional. On the other hand, it is some kind of failure to accept poor advice. As a policy of the company, as the goal of its practice, as an ideal to be approached, the suggested assignment of responsibility contributes enormously to more effective organization of work.

Problems in Systems Analysis

The damage resulting from the misunderstanding of help and the conflicting assignment of responsibility is nowhere more evi-

dent than in the design and installation of computer systems. Everyone recognizes that an integrated system involving the use of a large computer requires at least several man years to design and implement. It is natural to conclude that programming the machine takes this time; this conclusion, however, is as false as it is natural. Few experienced supervisors of modern systems work would disagree with the general picture represented by this tabulation:

	Man Months
Determine the function to be performed.....	9
Decide on an optimal system	3
Implement a strategy of minimal defeat.....	12
Code and test the system..	6

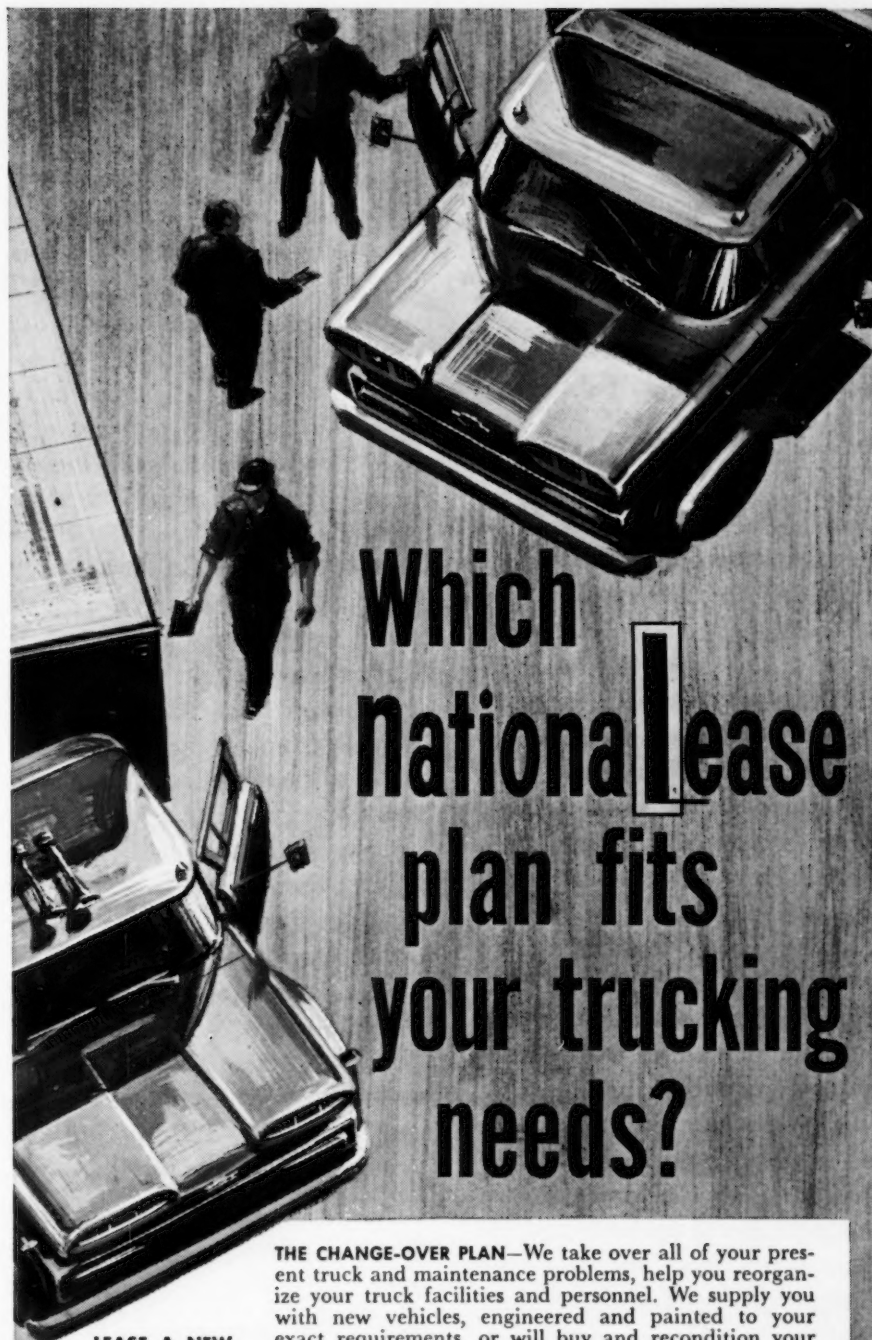
When a methods analyst, after months of painstaking investigation, understands the function to be performed, he will be able to present it to someone else in several hours. He and his workers will have decided upon a proposal that seems salable—somewhat more advanced than present practice but not so much so as to be unmarketable. This, of course, is already a defeat, but more defeats will come and the strategy is to minimize them—always without discussing the basic advantages of the project because their scope might frighten off half-sold supervisors.

In a certain large corporate headquarters, it has been the practice to report at a biannual accounting conference on the economics of a computer installation. The head of the systems effort presents a payout curve showing all costs since start-up compared to the cumulative effect of savings. No one could argue that the company should not know this, and there has never

been one question raised about the organization of the presentation. Still, the effort involved in collecting this information dismays everyone. Repetitive requests for savings estimates must be made of each work group that has been systematized. There are disagreements between the systems analysts and the line organizations about the size of the savings. Rather than pursue this argument throughout its disagreeable course, the superior of the head systems man encourages him to "fudge" the cost estimates in ingenious ways. Few requests for further systems service have originated from work groups systematized although they will often admit that the new system is much better. Management has decided not to make this study again because it generates too much friction.

The continuing effort to do new systems work causes the same friction, however. The systems analysts are well educated, and their lack of respect for the line organization is masked as well as they can manage in all contact with the line, but amply discussed in private. Their frustration index is high. The line organization, much less articulate, is sure of their own superior knowledge of work and refers to the systems analysts as "space cadets."

We can consider how systems work might proceed as opposed to how it does proceed to illustrate the value of the innovation proposed. First, systems work would begin only upon request of the supervisor whose own work responsibility was to be studied. The responsibility of making improvements would be his and the credit his. It would not occur to anyone to ask someone in a systems group to evaluate the sav-



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ings made. The systems group would be expected to furnish advice in accord with modern technology and would be equipped to understand the usefulness of all techniques no matter how abstruse. They would have the time to analyze the real requirements in the area studied and the creative ability to synthesize an effective new pattern of work.

Better Managers

One further point about the line management in the nonexempt department concerns who will initiate questions and implement the answers. A major innovation in American industry, though one that is little discussed, is the change that has taken place in the supervision of wage employees since World War II. Previously, the first levels of supervision in big plants were made up of men who had started in the wage ranks themselves. Many of these are still working, and there will always be room for the more capable. But in industries where there is rapid technological change, such as in refining or chemical processing, a new criterion of performance has been introduced by assigning young engineers to direct line responsibility. Many carpenters, welders, and unit operators continue to fit in as supervisors at high levels because they have the natural ability to accept worthwhile changes and they are confident and articulate enough to oppose constructively those they find unacceptable. Bringing in college-trained people has not pushed out all the experience-trained people but has established higher criteria for wage supervision and has greatly aided technological change in the factory.

A similar change needs to be made in the office. Methods work is a staff assignment. The relationship of staff to line personnel has always been difficult, and radically improved line supervision is not a panacea. Supervisors whose interests are served by noticeable improvements in the way work is done and by reductions in cost will still occasionally be in conflict with methods analysts for many reasons—including purely personal ones. But their personal goals are more like those of methods analysts than they are like the goals of supervisors who want to minimize change they may not understand and who feel committed to protect their employees from change. Staff work will be distinguished from the work of expediting, and different people will be involved. We shall, though, establish the same high criteria for work expeditors (supervisors in the Information department) as we do for professionals, and indeed frequently exchange assignments among staff professionals and supervisors in the Information department.

The Organization Man

In his book, *The Organization Man*, William H. Whyte, Jr., tellingly castigates the stultification that characterizes many business enterprises. The issues involved might be summarized by commenting that the corporation that does not number one or two nonconformists among its executives—not necessarily on the board but surely among those receiving stock options—had best examine its conscience carefully. If there is no executive with a beard, or who is badly tailored, or refuses to sign non-Communist affidavits, or obstreperously favors nonob-

jective painting, the corporation can wonder whether its organization allows effective use of all human resources. It is not true that the best financial strategists or management psychologists are those in well-shined shoes, and with weekly haircuts and attaché cases.

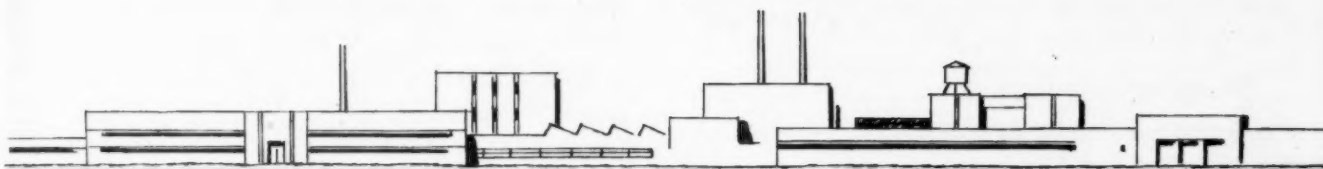
When a corporate structure allows only the good salesmen among professionals to rise to positions of high responsibility, the structure is unsatisfactory. One of the advantages of the proposed structure is that it will allow for quick recognition of the genius who is not extroverted. It will also allow the well-tailored manager to use his suggestions aggressively for the improvement of the enterprise. It will, in a word, make enterprise enterprising.

A VALUABLE innovation in the organization of work and management of workers would be to eliminate professional work as the basis for corporate structure, and to substitute the real pattern of work. Such an innovation allows us to recognize professional work as such, to establish clearer and more demanding criteria for that work, and to use it much more effectively. It also allows us to organize nonexempt work in accord with the way it is done, and forces upon those who manage workers a clearer responsibility for good management since it removes the pseudoprofessional responsibility they have had.

This change will cull the productive office employees from the average, substantially reduce nonproductive staff functions, eliminate many of the obstacles to cooperation between line and staff, and allow quicker implementation of good suggestions from staff professionals.

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TO THE EDITORS:

In Professor Hewitt's article "Law on the Links" [*Business Horizons*, Spring, 1961] he admonishes golfers to keep their eyes on people who might be hit, rather than on the ball. At long last we have the explanation for Professor Hewitt's high golfing scores—he hasn't kept his eyes on the ball! Perhaps if he were to be aware of where people were and then concentrated exclusively on the ball, he might hit it where he should without jeopardizing anyone—but this presumes muscular coordination and mastery of the club.

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BUSINESS SCHOOL REPORTS

TO THE EDITORS:

If the Carnegie and Ford Foundations' reports on collegiate business education carried pay loads powerful enough, in the judgment of *Business Week* (Oct. 31, 1959), to "knock the stuffing out of the business schools," the formal discussions which they detonated nicely absorbed the echo and dissipated much of the fallout. Although compiled separately, both studies—the Carnegie Foundation report by Frank C. Pierson of Swarthmore College and the Ford Foundation report by R. A. Gordon of the University of California (Berkeley) and J. E. Howell of Stanford University—came to similar conclusions concerning the state of collegiate business education. Specific conclusions were that collegiate business schools suffer from poor students, too many vocationally-oriented courses, superficial teaching, and an insufficient amount of general education and business research.

Within six months of publication of the reports, a number of conferences, some sponsored by the Ford Foundation, enabled educators and some businessmen to discuss the findings. A few evaluative articles were also written.

The purpose of this article is to summarize the reaction to the "explosion."

Business educators seem to have been willing to consider and to accept, with different specific reservations, the recommendations set forth in the reports. Among those articles written in response to the report only one [John W. Wingate, "The Question of Business Specialization in Colleges & Universities," *Collegiate News and Views* (May, 1960), pp. 1-6] seriously disagreed with the findings, although the orientation of the three writers of the reports (all are economists) would seem to offer ample opportunity for intellectual disagreement.

This lack of disagreement raises several pertinent questions. First, does it indicate willingness to accept as inherently impartial any report which is sponsored by one of the foundations? Are we at the point where we transfer the presumed objectivity of the foundation to the persons carrying out an assignment? Second, is it possible that there is willingness to discuss the reports but reluctance to do anything specific with them? Or, third, are we to conclude that the reports are generally acceptable to most business educators and that it remains only to discover ways of implementing the findings? To check these and other questions, let us look at collegiate business school objectives and accomplishments as reported by conference participants.

From the writings on the subject, it is not entirely clear what the business schools have been trying to do. The educational objectives are difficult to generalize, especially since they have been formulated by various types of universities and in consideration of a range of marketing, industrial, and financial organizations for which graduates are being trained. But, it was felt that many statements of the objectives of business schools are fuzzy, and one conference discussing the reports noted that some schools tend merely to echo "status" institutions.

The proper relationship between the business and academic communities is difficult to ascertain since, in many instances, there is little communication between the two. As a result, some business schools cannot design a curriculum that is realistic yet broad and long ranging. In addition, businessmen do not seem to have in mind, even in their best thinking, any image of the ideal business school graduate.

Other complicating factors mentioned in setting the direction of the business school are (1) the shoals of academic clichés about education (the all too common failure to think afresh even

about new problems, far less old ones) and (2) the rocks of academic community jealousies and "politics."

Finally, the business administration teacher often attempts to educate a future business leader by using descriptive materials from business, possibly from today but more likely from yesterday—and not even "classical" instances. The result is often a kind of recipe, a cookbook knowledge of obsolescent practices. Obviously, only depth of analysis and teaching can save such materials.

Some discussants contrasted "micro" and "macro" approaches to the phenomena and principles of business. They agreed that the accounting student may need a micro grasp of his specialty, but the general business major needs a macro approach. Many conferees seemed to feel that business education should be weighted toward the macro, but they also wondered aloud whether the Ford and Carnegie reports had not stressed the macro approach too much. Could there be a macro business education so broad as to be generally applied? If not, how then can a school of business serve the differing needs of business, students, and its parent educational institution?

Furthermore, some conferees felt that the reports might lead business educators to think, falsely, that their problem is unique. In fact, a number of departments, as well as the general programs of undergraduate colleges, have faced similar problems.

When the conferees discussed the course requirements in schools of business administration, they encountered an almost bewildering variety. The amount of specialization required varies widely, especially at the undergraduate level. Many graduate programs are set up for students with a broad background in education, others for the specialist, some apparently for both. Some of the participants pointed out, however, that this variety is one of the great advantages of relatively decentralized and individualized American higher education. These people felt strongly that no general pattern for business education could meet the patently diverse demands.

At the conferences, there was some disagreement with the statements of the reports on the quality of students. To summarize, the reports concluded that business students have less mental ability than the typical college student. Some of the conferees agreed with this conclusion, but others denied that it was true. Many questioned the interpretation of evidence presented in the reports. A speaker at the Oklahoma conference stated that, "The authors became rather exces-



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sively dogmatic on the matter of our students without a very exhaustive presentation of supporting data. In fact, I think this may be one of the weaker portions of the entire report."

On the whole, writers and conferees are agreed that there is need for more investigation of what constitutes quality in business students. They hold that differences in students are not tantamount to degrees of quality. All felt that success in business depends on "nonmental" traits as well as "mental" ones. Nobody seemed to have an adequate measure of both kinds of traits. It was agreed that business needs to do research on the qualities of successful businessmen just as the business schools need to do research on admissions criteria, aptitudes, and course achievement.

Many educators related the need for better students with the need for a new scholastic image. It was felt that, in many instances, right or wrong, business schools have acquired the reputation within colleges and universities of being dumping grounds for flunkies from other fields. There is also the feeling that the schools are, and should be, vocationally oriented.

It will take time to create a new scholastic image, and the faculty must contribute heavily toward this goal. The Palo Alto conferees heard this typical statement: "If teachers present challenging courses that require hard work to learn, interesting and creative material that will attract better students, this will tend to repel and eliminate the less able and lazy students."

What was said about the students in specific terms? Little attention was given to the detailed analysis of "Bus. Ad. Joe" in the important areas of motivation, leadership, and academic success. Lack of objective research data seems to contribute to the lack of definitive statements in the minutes and evaluative articles. The following are the meager gleanings. First, it was generally agreed that student motivations are mainly vocational and materialistic. Second, some felt that there is a need for further investigation before accepting the Ford report statement that business students come from a lower socio-economic class. Third, the conferees felt that business students excel in the areas of leadership, although again more information on this subject is needed.

The following statement from the Palo Alto conference typically and effectively sums up the situation as to student quality: "The essential qualities for business success were considered not well-enough established to make it absolutely certain just what qualities would be ideal in students,

although it was generally felt that a higher level of scholarship would be desirable."

The conferees felt that the two reports "did not objectively examine faculty quality." The point of greatest contention seems to be the Ford study's categorization of the faculty into applied social scientists, scholarly inclined professors of business administration, managerially oriented professors of business administration, and textbook and/or vocationally oriented teachers. There was some defense of the vocationally oriented teacher on the grounds that even vocationally oriented courses can be taught "liberally." For example, the liberal areas of psychology, sociology, and the like should be brought into the marketing course. A vocationally oriented instructor who did this would, it was felt, be reaching toward the objective of broader education. On the other hand, the psychologist and sociologist, while analyzing certain phases of marketing, might produce only more specialists.

The consensus of opinion seems to be that the business curriculum should be broadened not only with additional courses from the liberal arts—about 50 per cent of a four-year program—but with a broadening of the base of the individual business administration course. All the conference reports agree that some vocational course work is both necessary and desirable.

It was generally felt, also, that a "vocational" instructor does not have to be a narrow specialist, any more than the expert in Elizabethan literature is. In short, the amount of liberal arts education in the business school depends upon the amount of liberal emphasis and interrelationship in the business subjects themselves. This concept of liberal education suggests some questions. First, how does one "retread" an old-timer steeped in narrowly vocational teaching? Second, where do the heavily vocational courses, like accounting, fit in this liberal concept?

Problems concerning the relationship between teaching and research were discussed. First, should business schools do pure or applied research? Second, what quantity of research should be expected of a faculty member? There were no definite recommendations for these problems. However, one suggestion called for separate faculties—one for research and one for teaching.

In summary, it seems that the business educator has been a little more sensitive about the faculty than other areas in the Carnegie and Ford reports. He feels that the situation is not so critical as painted, but he acknowledges there is no faculty that could not be improved.

To date, what has been the outcome of the

Another general recommendation was that the top universities provide curriculum building teams to consult with other schools that are framing programs—a sort of “have curriculum, will travel” movement. Obviously, generalized cur-

Whatever the limitations and dissipation of energy, it seems clear that the discussionall fallout generated by the Ford and Carnegie reports may serve to clarify at least some of the objectives of American collegiate business education. If so, a giant step forward will have been taken.

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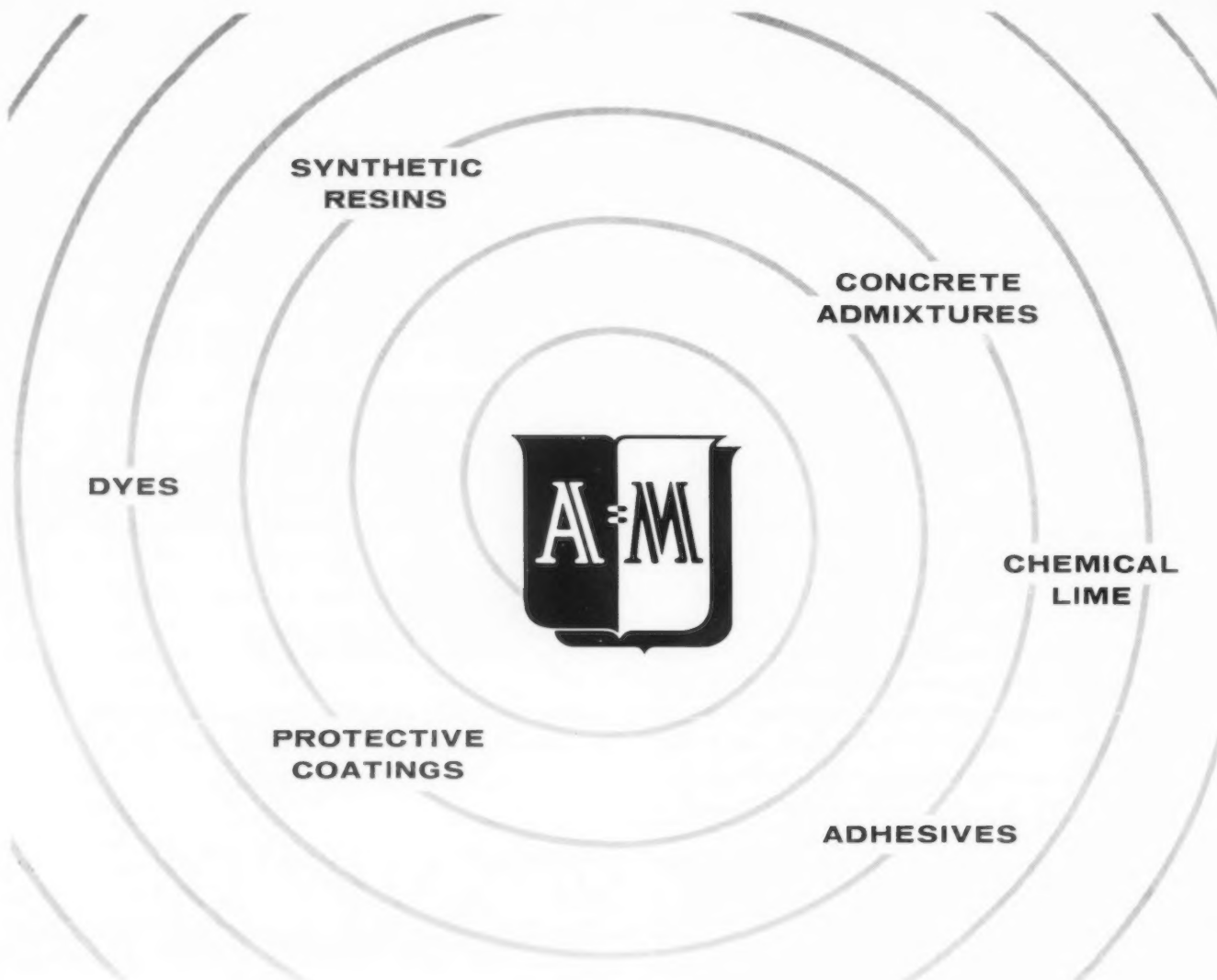
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MATTHEW E. WELSH

Administration in a Goldfish Bowl



IT APPEARS, occasionally, that one of the favorite indoor sports of business executives is criticism of government—of how it operates rather than of what it does. Efficiency, speed, competency of employees, and measurable results are among the most com-

mon targets for unfavorable comparisons with business. As a businessman and attorney, I am not unfamiliar with commercial practices, and I have had a reasonable range of experience in directing business operations. But I have also had—and am having—the opportunity to see the problems of governmental administration at intimate and close range. I can assure you that, while there are some similarities, there are also vast differences between business and governmental administration.

For example, the decisions that the businessman must make, the reasons for them, and even the developmental stages of making the decisions are private and need be divulged only to his directors—if, in fact, to them. On the other hand, a public official operates in a veritable fishbowl. Every decision, as well as the process of making that decision, the reasons for it, and every act and policy change are not only matters of public information but public explanation and, on occasion, public criticism as well. How many business execu-

The Honorable Matthew E. Welsh is the Governor of the State of Indiana.

tives would permit newsmen to sit in on board of directors' meetings in which the most basic and vital policies and the finances of their business were being discussed and determined? How many would permit the publication of their salaries, their expenses, what they do, whom they see, and where they go and why?

At times, the executive in government can set his own pace, but he is usually driven by events and pressures that are not of his making. He does not decide, for example, what new products will be launched (the legislature does that for him), but he must make the decision work. Nor does he decide whether to retrench. He may even be given more assignments by the legislature and, at the same time, be given a smaller staff to carry them out.

If a business executive wants to employ a skilled department head, he will pay the amount necessary to get the man to come with his firm. But government salaries for top executives are far below salaries for comparable positions in business; as a result, I must use persuasion and hold out the opportunity for

public service—and not personal reward—as the only attraction to those to be appointed. At the same time, I am obligated to warn each new recruit that, no matter how well a job is done, it cannot be perfect. Each flaw will be highlighted by news media—as it should be.

A businessman's records are confidential; a public official's records are public. It is something like trying to think and work with 4 million people looking over your shoulder. But this is as it should be. Government officials are operating the public's business and using the public's money, and the public is entitled to know what is going on; the opposition and news media should constantly exercise their right to criticize. By way of comparison with the business world, this is something like trying to operate a business in the middle of a proxy fight that goes on every day of every year!

THE public also feels a certain proprietary interest in everyone on its payroll. A business executive can close his office door and become a private citizen; a governmental executive



never can. He must be careful with whom he has dinner, where he goes, and what he says. These activities can affect the operation of his department; in fact, the government executive can never close the door of his office.

Among these marked differences between business and governmental management, probably the most striking one relates to the number of people to whom an executive is responsible. The Governor of Indiana is directly responsible to more than 4 million people organized in a multitude of groups, many of them seeking conflicting services from their state government. Many citizens, of course, simply speak for themselves, and not with one voice or one opinion, as the mail to my office indicates. Yet the president of a corporation and his top executives are usually responsible to a relatively small group of people—their board of directors, a group with limited interests and goals.

For these reasons, business executives tend to become experts in a rather narrow field. They are, in fact, specialists of a very high order. The engineer, the accountant, and the production man are accustomed to precise and definite answers. They know their business, and they have confidence in their own ability to conduct it; they know what the answers should be in a given situation. Businessmen frequently have a tendency to carry this confidence into their discussions of public questions, where the problems are tremendously different and far larger in scope. As a result, they sometimes become intolerant of differences of opinion.

Unfortunately, in public affairs, there are more than just two sides to an issue—there can be twenty sides. Instead of an answer, provable by statistics, slide rules, engineering, or scientific skill, there may in fact be no good answer at all to a public problem; there may be only one that appears to most to be more desirable or perhaps less undesirable than the others. As the wide range of opinions, usually honestly and conscientiously held, on almost every issue or governmental program becomes

apparent to a public official, he develops an increased understanding and tolerance of differences. Frequently, a yes or no answer is impossible. To a large extent, his job is to reconcile, to the degree he can, the differences in what the people appear to want with what appears to be the best policy and the best administrative practice, and with what is legally, financially, and politically possible—and to do this juggling while peering out of a fishbowl. No wonder things appear to move clumsily! It is a fascinating challenge to those who are in public service, but it is nonetheless difficult.

IF I were to make a suggestion to businessmen seeking guidance on matters of public policy, I would say to beware of the man with pat answers to problems. Be tolerant. Be wary of the advocate of the quick and easy solution, and give a wide berth to the one who determines his position on public issues on the basis of personalities or private interests. Give the official the benefit of the doubt.

It would seem to me that it is in the best interests of the business community to adopt a constructive, helpful attitude toward public officials, and this includes almost all of them in both parties who are trying to do a good job serving the public. For businessmen to do this requires some understanding of the difference in kind and magnitude of the problems faced by public officials. And it requires recognizing that the businessman who enters government can no longer act with the degree of independence, freedom, pioneering, and limited responsibility that he could in business. He cannot because the law and the people will not and should not let him.

The businessman has an obligation to serve. Just as he is concerned with integrity of a trade-mark and the confidence the public has in it, so must the government official be cognizant of the importance of maintaining the confidence of the people in our form of government. We must continually demonstrate that we can and will make a good faith effort to

meet and solve, if possible, the problems of our people—all of the people, particularly those at the low end of the income scale. Our whole structure of government is built upon this implicit faith in the ability of our government to serve its people. All of this means that those of us who have been fortunate enough to have had the benefit of a fine education and who have a full share of this world's goods have a particular responsibility to contribute our services to see that our system works and works well, and to assist in proving every day that it merits the confidence of our people.

And now there is another consideration that has appeared on the scene. The many uncommitted nations of the world—the Near

East, Africa, Asia, and South America—are looking abroad for systems to emulate. In our contest with other systems of government, we cannot expect them to adopt our approach if there is any real question about the ability of our system to meet the needs of its people. Thus we must prove, not only to our own people but to the uncommitted nations as well, that democracy does work and work well, or we will face the prospect that conflicting ideologies or disciplines will prevail abroad in this contest for the minds of men. It is my earnest hope that these remarks about the difficulties of public service will not deter the businessman from doing his share, at some level, in making our democracy work.

IN AMERICA there is not one single element of civilization that is not made to depend, in the end, upon public opinion.

—Henry Ward Beecher

PROVERBS FROM PLYMOUTH PULPIT

Need We Fear Japanese Competition?

AFTER YEARS of relative indifference, Americans have suddenly become acutely aware of foreign trade and competition. For the first time in recent history, we have a balance-of-payments problem. Expenditures abroad by the government and private citizens are exceeding purchases from the United States by other nations, causing a heavy outflow of gold from our country in settlement of international claims. Unemployment is high in some industries hard hit by foreign competition. These facts are cause for concern and have stimulated a general re-evaluation of our foreign trade policies; the government has taken steps to restore balance in our international accounts, and is contemplating further action. In addition, many suggestions for handling the present situation have been made. Some will help to correct the problems without doing long-run damage to the position of

the United States in international trade. Some proposals, however, based on uninformed opinion and a misunderstanding of foreign trade, will perhaps solve the present problems, but only at the expense of our future position in the world market.

Competition from Japan, more than that from any other country, has been widely recognized as a threat to U.S. industry. The results of one survey¹ show that over one-third of those interviewed oppose trade with Japan because they feel that it will harm the United States economy. There was more opposition only to trade with Soviet Russia. This attitude toward trade with Japan is held despite the fact that we trade less with Japan than with a number of other countries, and also despite the fact that the United States sells more to Japan than we buy in return. It is the purpose of this article to review trade between the two countries, to consider whether such trade is a threat

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¹ "Buying Japanese," *Business Week* (September 19, 1959), p. 150.

TABLE I

Japanese Trade with the United States, 1954-58

(in millions of dollars)

	1954	1955	1956	1957	1958
Exports	282.9	457.1	551.6	606.6	692.5
Imports	849.1	774.0	1,067.4	1,626.2	1,057.7
Net trade balance	-566.2	-316.9	-515.8	-1,019.6	-365.2

SOURCE: Statistical Office of the United Nations Department of Economic and Social Affairs, YEARBOOK OF INTERNATIONAL TRADE STATISTICS: 1958 (New York, 1959), p. 328.

to the economic welfare of the United States, to evaluate the competitive strength of Japanese industry, and to reach conclusions concerning what actions, if any, should be taken regarding such trade. Although the conclusions will apply specifically to Japanese-United States trade, they are also suggestive of what our position should be concerning international trade in general.

THE TRADE PICTURE

Our imports from Japan have been increasing at a rapid rate in recent years. From \$282.9 million in 1954, imports rose to \$692.5 million by 1958, an increase of 145 per cent in four years. During the first three quarters of 1959, imports amounted to \$726.4 million, more than the total for the full year of 1958. For all of 1959, Japanese exports to the United States exceeded those of the previous year by 50 per cent. Our sales to Japan, on the other hand, increased only 2 per cent during 1959. In the first quarter of 1960, the demand for Japanese products continued to increase, raising our imports from Japan 31.2 per cent. This upward trend began to falter in the second quarter of 1960 when the rate of increase fell to 12.7 per cent. During the third quarter, the growth was less than 1 per cent.² It is, however, too early

to tell if this recent decrease in demand for Japanese products in the United States is only temporary or if this constitutes the end of the long upward trend.

At first glance, Japan's increase in exports to the United States seems ominous, and results in cries for action to halt the flood of Japanese products. But when this situation is looked at in proper perspective (see Table 1), it is less evident that a need for drastic action exists. Japan's exports to the United States have increased rapidly—but from a very low base. If we consider only the exchange of identifiable products between the two countries (and this is the pertinent comparison if we are trying to assess relative competitive effectiveness), Japan has, year in and year out, suffered a deficit in trade with the United States. The United States has recognized Japan's need for removing this deficit and has been, in general, sympathetic to actions taken by Japan toward this end. Not much progress in this direction was made before 1959. The problem was made extremely difficult by the heavy dependence of the Japanese economy on imports, particularly imports from the United States. These imports could not be reduced without unfavorable effects upon the Japanese economy. Thus the only available approach was to attempt to increase exports in order to earn the funds necessary for these indispensable imports. The efforts to do this have at last begun to bear fruit.

²Mitsubishi Economic Research Institute, *Monthly Circular, Survey of Economic Conditions in Japan* (December, 1960), p. 8.

CAUSE FOR CONCERN?

It is interesting to speculate why there is so much concern about imports into the United States market from Japan when, in fact, the Japanese have long been better customers for us than we have been for them. Perhaps there are many reasons for this attitude, but three factors appear to be of primary importance. First, the trend in Japan's exports to the United States has been consistently upward over a long period, while no such upward trend is evident in our exports to Japan. Second, imports from Japan make a big impression on the consumer market and compete directly with American-made goods; this is not true of our exports to Japan. Third, imports from Japan tend to be concentrated in certain product lines and often represent a significant share of sales for these types of products in our market.

The Trend

Table 1 shows a consistent and substantial increase in Japan's exports to the United States since 1954. In fact, such exports have been rising ever since the end of World War II. Although our exports to Japan have been consistently larger than our purchases from that country, they have fluctuated widely and no upward trend is evident. A simple extrapolation of these trends leads to the conclusion that the U.S. will soon be buying far more from Japan than it will be selling to Japan. Should this occur, it would aggravate our balance-of-payments problem and perhaps reduce employment here. One of the conclusions than can be drawn from this article as a whole, however, is that these relative trends will probably not continue.

Direct Competition

Our imports from Japan are mainly consumer products: clothing, toys, chinaware, photographic equipment, transistor radios, stainless steel flatware, and so on. These products are

usually branded, easily recognized as Japanese imports, and widely distributed throughout the United States. United States products exported to Japan, on the other hand, include wheat, raw cotton, scrap iron, fertilizers, and soybeans, plus a great variety of capital equipment items. Raw materials and capital goods imports do not make much of an impression on the public. Hence, there is little awareness of the volume of such imports.

In most instances, Japanese imports compete in our market with similar products of United States manufacture. This competition threatens United States industry as well as domestic employment. Politicians are sympathetic to the plight of these industries, and there has been much discussion in Congress and elsewhere about what should be done to help them. A similar reaction does not occur in Japan. Japan lacks raw materials of most kinds, and, as a result, imports from the United States do not compete with Japanese products.

Concentration of Exports

Although many different goods are imported into the United States from Japan, there is a significant degree of concentration in a few classes of products. In the first half of 1959, over two million Japanese radios were shipped to this country. Over 90 per cent of the chinaware purchased in the U.S. is imported, mostly from Japan. In 1958, Japanese stainless steel flatware exports to the United States equaled one-half of our domestic output. Photographic goods imported from Japan rose from \$1.2 million to \$28.2 million between 1954 and 1958. These are dramatic figures, and they reflect a major competitive threat to several United States industries. Our sales to Japan, with a few exceptions (cotton, for example), represent just a small percentage of total United States output of these products. It thus appears to many people that some of our industries are suffering substantially from Japanese competition, while others are benefiting only modestly from their exports to Japan.

Under these circumstances, it is easy to forget that it is Japan that traditionally suffers a deficit in its trade with the United States.

JAPAN'S ECONOMY

Although our trade relations with Japan have in the past been satisfactory, it is possible that our imports will continue to rise while our exports do not keep pace. This imbalance is unlikely to happen in the near future because Japan appears willing to remove restrictions on imports from the United States in order to prevent it. Our exports to Japan in 1960 increased 37 per cent over 1959 after the Japanese government lifted import restrictions on 270 items. The likelihood of a severe imbalance of trade in the future will depend largely on the relative competitive strength of United States and Japanese industry. A closer look at the Japanese economy and its industry will be helpful in determining the effectiveness of our competition with Japanese industry.

Over-All Strength

The present state of health of Japan's economy looks good indeed. In the period from 1950 to 1953, Japan's gross national product grew at an annual rate of over 10 per cent. This high level was due in part to the Korean conflict. From 1953 to 1957, the annual rate of growth was about 7 to 8 per cent. The year 1958 was a bad one for Japanese exports because of the recession in the United States, but in 1959 the rate of growth climbed to an astonishing 16 per cent, thus making up all at once for the lack of growth the year before. In 1960, the Japanese economy grew at a rate of 12 per cent. In order to see the growth of the Japanese economy in perspective, it must be noted that in this same decade the United States economy was growing at an annual rate of around 3 per cent.

The rapid growth of Japan's economy is due mainly to the growth of industrial production.

Industrial production indexes for the period 1950-57 (1934-36=100) are as follows:

1950	93	1954	167
1951	118	1955	190
1952	131	1956	232
1953	161	1957	263

These data reflect an average annual rate of increase in industrial production of 16 per cent between 1950 and 1957. It should be remembered, however, that this rate of growth was built on a very low base. Reflected here is a "catching up" with other countries, since Japanese industry was virtually wiped out at the end of World War II. Also, this rapid rate of growth is not likely to continue as Japan's economy reaches higher levels of maturity. As late as 1955, employment in Japan was still distributed as follows: 41.2 per cent in primary, 23.8 per cent in secondary, and 35.0 per cent in tertiary or service industries. The United States, in contrast, has only 4.3 per cent of its employment in primary, 34.8 in secondary, and 60.9 per cent in tertiary industries. As Japan's employment in tertiary industries increases, its rate of growth will decrease.

Increasing Efficiency

Along with industrial output, productivity of Japanese labor has also been increasing at a rapid rate, as shown in Table 2. Notice, however, that it was not until 1953 that productivity reached the prewar level. The 36 per cent increase in the next three-year period, therefore, is not so hard to comprehend. Again, it reflects a "catching up" with the rest of the world and does not necessarily indicate that Japan is going to surge ahead of its competitors in international trade. Japan's productivity increase reflects a high rate of investment in industrial plant and equipment during the 1950's. From 1950 to 1958, the percentage of Japan's gross national product invested in industrial plant and equipment was 17 per cent.³

³Keizai Kakusho Zuzetzu, Economic White Paper, (Tokyo: Economic Planning Agency, 1960), p. 3.

TABLE 2

Productivity, Real Wages, and Wage Costs in Japan, 1947-1956

(1934-36=100)

Year	Productivity	Real Wages	Wage Costs per Unit of Output
1947	25	28	110
1948	38	47	124
1949	49	59	122
1950	61	77	125
1951	80	84	106
1952	86	96	111
1953	103	103	100
1954	106	105	99
1955	118	110	93
1956	139	120	86

SOURCE: ECONOMIC SURVEY OF ASIA AND THE FAR EAST: 1957, *Economic Bulletin for Asia and the Far East* (Bangkok, 1958), p. 46.

The investment in industrial plant and equipment in the United States during this same period was 9 per cent of the gross national product. In absolute terms, of course, United States investment was much larger.

During the second half of 1959 and the first half of 1960, the author visited a large number of Japanese plants. Despite the recent heavy investment in Japanese industry, an observer cannot help but conclude that Japan is still behind the United States in most aspects of industrial efficiency.

The Labor Cost Factor

Much of the opposition in the United States to imports from Japan centers on the "cheap labor" factor; the argument is that United States industry cannot compete in trade with a nation whose labor is "exploited" in order to make low production costs possible. It is true that labor costs in Japan are low by United States standards. The average Japanese family has an income about one-seventh of the income of the average United States family. In many industries the ratio is even greater. Japan has what is often referred to as a "duo-economy," with large firms and small firms

forming separate and distinct economic structures. Wage rates in small firms are only about 40 per cent of the level in large firms. It is these low wages in small firms that are often quoted when comparisons with United States wages are made. However, these small firms are not competitive despite their low labor costs because they are inefficient and do not export in significant volume. Because it is the large-scale industry of Japan that exports to the United States, the wage rates paid in this sector are important in our discussion.

To simply compare wage rates between Japan and the United States does not tell the whole story of relative labor costs. Japanese wage costs, though lower, are relatively more fixed than in the United States. Once hired, labor in large companies in Japan tends to have permanent tenure, and employment does not fluctuate greatly with changes in volume of output. There is a strongly ingrained tradition of paternalism that provides Japanese employees with the equivalent of a guaranteed annual wage. This same attitude of paternalism means a high cost for fringe benefits such as employee housing, recreational facilities, and medical care. Employees are retired at the early age of 55, and the company provides for all minimum needs of the retired employee and his family. Compensation in Japanese companies is based largely on seniority and family responsibility rather than on contribution. This system does not stimulate high productivity. One should also remember that the low average wage cost in Japan exists side by side with a very high cost of capital and raw materials. To a large degree, these factors offset one another.

Table 2 shows that wages have not kept pace with rising productivity in Japan, and wage costs per unit of output have declined. This is due in large measure to widespread underemployment, sometimes called "disguised unemployment," in Japan's labor market. It has been estimated that the extent of such underemployment in Japan is between 6

and 7 million, or over 15 per cent of the labor force. Thus, as Japan's economy grows and the demand for labor rises, there is no upward pressure on wage costs. Japan's population, however, has now stabilized, and the amount of such underemployment will thus gradually be reduced as the economy grows. By 1970 or thereabouts, it probably will no longer be a major factor holding down labor costs. Also, Japanese labor unions are growing in strength, and Japanese people generally are strongly demanding a better life. Upward pressures on labor costs are bound to come.

Other Competitive Weaknesses

Japan's heavy dependence on far-flung sources of supply is probably the major competitive weakness of Japanese industry. Disproportionately high raw materials costs rule out Japan as a competitor in most cases where material costs, not labor costs, are the major part of total cost. To this must be added the fact that Japan is disadvantageously located in relation to the major markets of the free world, primarily North America and Western Europe. This rules out Japan as a strong competitor wherever transportation costs, relative to product value, are high.

Most countries are strong as exporters of those products that also have a large domestic market. This situation creates economies of scale and helps to give the exporting firm a strong position in world markets. Looked at in this light, Japan's low wage scale, which limits domestic demand, actually retards exports. In

contrast to the United States, Japan has a potentially large domestic demand for relatively few products. Its export strength to date has been largely in those lines where its domestic demand is also high (for example, textiles and cameras), and it is unlikely to suddenly become a strong competitor in other fields.

Our assessment of Japan as a competitor has been based mainly on its advantages and disadvantages in production and transportation costs. It would be a serious error not to point out that Japan also suffers, and perhaps more than other areas, from a lack of sophistication in marketing. Marketing research is just beginning to be recognized in Japan, and its industry has made many mistakes because it made wrong assumptions about markets and competition. Product development in Japan is still largely a hit-or-miss affair, involving virtually no marketing research at all. Its domestic distribution system is quite inefficient, with the manufacturer often exerting little influence over the marketing of his product once it leaves his own hands. Japanese firms tend to follow the same policy abroad, selling through middlemen whose activities they do not effectively supervise or control. Perhaps this explains their heavy reliance on price to attract interest in the market. Where a low price will not sell a product, they are not aware of alternative approaches. In the future, as their cost advantage declines, their competitive price advantage can also be expected to weaken.

SOME OTHER FACTORS

On the basis of a comparison of our exports to and imports from Japan, it is obvious that the U.S. derives substantial benefits from such trade. It is, however, a mistake to reach conclusions about the benefits from trade with Japan on this basis alone; some important political factors must also be considered.

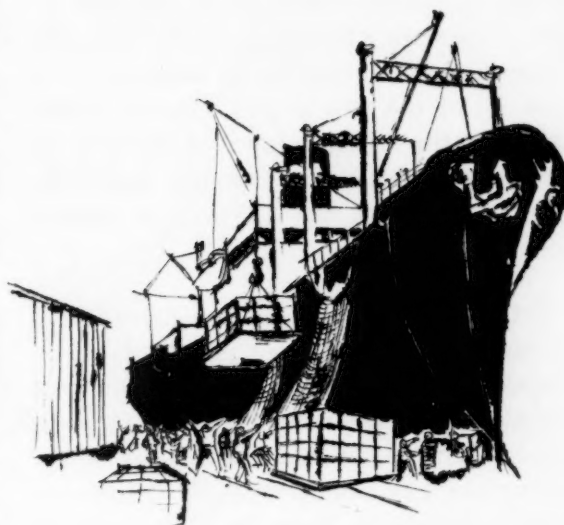
Japan occupies a position of strategic significance in our foreign policy. It is the greatest bulwark of freedom and capitalism in all of Asia; it is one of our most important military



bases in the struggle against world communism; it is a showpiece for all the world to see of the effectiveness of free enterprise in economic development. Potentially, it is one of our strongest allies in providing aid and guidance to underdeveloped lands, particularly in Southeast Asia. Surely it is in the best interests of the United States that Japan remains strong economically.

Japan cannot remain strong economically without a healthy foreign trade. In order to keep its economy operating it must import all of its requirements for cotton, wool, rubber, phosphates, bauxite, and oil. It is heavily dependent on outside sources for wheat, sugar, soybeans, salt, and coking coal. To pay for these imports, Japan must export. If exports fail to grow, the economy cannot grow. In recent years, Japan has had to import an amount equal to about 15 per cent of its net national income. At the same time, its exports were running at a level of about 12 per cent of net national income.⁴

Not only is foreign trade essential to the economic well-being of Japan, but trade with the United States in particular is highly important to Japan's economy. In 1959, some 40 per cent of Japanese imports came from the United States, which in return absorbed some 35 per cent of Japan's exports.⁵ This is a major shift from the prewar period when only 27 per cent of Japanese imports came from the United States and 18 per cent of its exports went to the United States. This change in the relative importance of the United States in Japan's foreign trade reflects in large part the loss of China and some other parts of Asia as sources of supply and markets. A logical alternative to trade with the United States is for Japan again to trade with these areas, now part of the Communist bloc. This might undermine Japan's position as a market for



United States exports, and would certainly cause undesirable complications for our foreign policy.

With Japan so heavily dependent on imports, it follows that a healthy Japanese economy will provide a good market for United States exports. We produce many of the things that country needs. The relationship between our imports from and our exports to Japan is, however, even more direct than this. Some of the products we sell Japan go into products we, in turn, buy back. One of our major imports from Japan is cotton textiles, and Japan is by far America's best customer for raw cotton. We import steel and steel products from Japan, and the United States supplies Japan with from 33⅓ to 50 per cent of the scrap metal and 25 to 30 per cent of the coking coal needed by its iron and steel industry. Thus, action to reduce our imports from Japan would directly affect our opportunity to export. There is at present much discussion of the necessity to build United States exports to correct our balance-of-payments difficulties. Cutting our imports does not seem the best way of accomplishing this objective.

ON THE BASIS of the above evaluation, we can make the following conclusions concerning trade between Japan and the U.S.:

⁴H. Michael Sapir, *Japan, China, and the West* (Washington, D.C.: National Planning Association, 1959), p. 12.

⁵*Keizai Yoran*, Economic Summaries, (Tokyo: Economic Planning Agency, 1959), p. 174.

1 The competitive strength of Japanese industry is increasing in relation to the competitive strength of United States industry. This narrowing of the gap is probably inevitable considering the different levels of maturity of the two economies and the greater ease with which an economy can advance in certain earlier stages.

2 It is to the advantage of the United States for Japan to be strong economically. Japan is an important customer for United States products now, and as her economy grows Japan is likely to become an even better customer. The continued economic strength of Japan is also very important from the standpoint of American foreign policy. Japan's economic strength is heavily dependent on its foreign trade and, in turn, the United States market

is extremely important to the foreign trade of Japan.

3 United States industry is still more competitive than the industry of Japan. If our industry rises to the challenge of competition from Japan, it can be expected to hold its stronger position. It has no need of government help for this purpose.

4 The United States government should not set up artificial barriers restricting the sale of Japanese goods in the United States market. Rather, it should make our own businessmen aware of the opportunities for sale of United States products, both in Japan and elsewhere. A major assistance to business would be the removal of restrictions that still exist in Japan and other countries on the importation of United States products.

OUR GREAT state of California produces about sixty millions of dollars in gold every year, besides silver, quicksilver, precious stones, and many other valuable articles. Japan is also a rich and fertile country, and produces many very valuable articles. Your imperial majesty's subjects are skilled in many of the arts. I am desirous that our two countries should trade with each other, for the benefit both of Japan and the United States.

We know that the ancient laws of your imperial majesty's government do not allow of foreign trade . . . but, as the state of the world changes and new governments are formed, it seems to be wise, from time to time, to make new laws. . . . [We] think that if your imperial majesty were so far to change the ancient laws as to allow a free trade between the two countries it would be extremely beneficial to both.

MILLARD FILLMORE, PRESIDENT OF THE UNITED STATES
TO HIS IMPERIAL MAJESTY, THE EMPEROR OF JAPAN—1853

A Tonic for Enterprise

BUSINESS MUST continually search for fresh approaches to meet the needs and spirit of the economy. Sometimes it vainly tries passing fashions; at other times, it makes great advances exploiting solid, timely concepts. In the booming twenties, business revolved around the promoter and financier. In the depressed and strife-torn thirties, cost-cutting controllership and peace-making labor relations rose to major status. Innovators flourished if they could bring forth new goods, services, and methods. In the forties, expeditors and coordinators took the reins to deliver maximum war production. Personnel management blossomed into its own as industries fought for scarce man power.

This operative emphasis carried on into the postwar seller's market. Although there was a hint of exhaustion in the dip of 1949, the events in Korea quickly rekindled the boom for the fifties. Executive development and human relations came into vogue to produce conflict-free replacements for a generation of managers accustomed to automatic growth. Long-range planning lent authority to passive extrapolation of statistical trends, while the corporate image depicted our apparent success. Marketing received renewed attention by some crusaders, but what was practiced

was intensified merchandising, the matching of a narrow range of product variations with consumer preferences. Finally, hard selling and massive advertising spent themselves in a vain attempt to rescue the automobile industry from the inevitable consequences of the smug belief that embellishment—not fundamental improvement—could maintain an industry.

What approaches will business adopt in the 1960's? The need for fundamental improvement in the effectiveness of private enterprise will become increasingly evident in this decade. We face major paradoxes on all fronts. We must compete against growing communist economic and military power, yet maintain our living standards. We must aid uncommitted nations, yet guard our monetary reserves. We must boost exports against mounting foreign competition, yet increase wages. We must pay for new federal aid in health, welfare, and education, yet offer tax incentives to stimulate economic growth. If positive action on these problems is not taken soon, these paradoxes could bury us, reversing in the second half of the twentieth century the position of eminence we have won during the first.

What choices do we have? If we choose to disarm and abolish foreign aid, some of these paradoxes would disappear, but in their stead

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would come worse hazards that render such a choice unrealistic. Another choice is austerity and sacrifice, but these defeatist measures have not yet proved to be acceptable to the American people except in times of all-out emergency. If the American people do not choose to accept austerity, perhaps this indicates that they sense still another choice, one faithful to their American heritage of enterprise and optimism: the choice of increased productivity and creation of new enterprise.

The two go together. As productivity increases, more is produced for less. Those who remain fully employed enjoy more and better goods and services. Those displaced by technological advance and other means of enhancing productivity remain to be assimilated. Even if we could evolve a politically acceptable pattern to distribute less work and more leisure, we dare not thus indulge ourselves while poverty surrounds us in so much of the world. Moreover, labor is coming to realize that featherbedding is only a protest, not a solution. Hence, the creation of new enterprise is fundamental to overcoming structural unemployment and, at the same time, servicing the new demands of both our international responsibilities and our domestic aspirations.

WHAT GETS new enterprise built? The definition of one word fits the task precisely: the putting together of market, materials, labor, and capital to create enterprise. The word is entrepreneurship.

Yet, we have paid only scant attention to the entrepreneurial function as such. Why? The meaning of the word originated when business was small and it generally has not been modified to fit the needs of modern big business. For example, the National Industrial Conference Board's "Economic Almanac" for 1960 defines an entrepreneur as a self-employed proprietor of an unincorporated business who combines labor and management functions; as an individual who undertakes, initiates, and operates any type of business enterprise; or an enterpriser. A more up-to-date meaning is provided by Melvin Salveson,

President of The Center for Advanced Management, who breaks away from the concept of petty ownership and, with a touch of idealism, defines the entrepreneur as "one who, with a high sense of responsibility and purpose, perceives the need for and builds the enterprises which supply our material needs and provide employment opportunities."¹

The times have not demanded that attention be paid to the entrepreneurial function. The operative emphasis begun in World War II was greatly prolonged by the pent-up post-war demand and by Korea. Except in small businesses, entrepreneurship has become the province of a few top businessmen and is actually practiced by even fewer. It has come dangerously close to being bred out of middle management. A top position is required because the entrepreneur must be empowered to act, to venture, to argue back, and to fight for convictions. The entrepreneur must also be a man of dreams, imagination, intuition, and creativity, plus analytical ability, strong convictions, persistence, aggressiveness, great energy, and willingness to take risks. These traits are not always consistent with the political responsibilities demanded for reaching, and remaining at, the top. Moreover, comfortable riskless command privileges often are sought as the reward for success in previous hard entrepreneurial work.

There are no proven means for delegating the entrepreneurial function downward. Entrepreneurial analysis teams and special staffs for corporate development can help, but they remain advisory, not executive. For the entrepreneur, the whole enterprise is the irreducible minimum of responsibility. Where potential entrepreneurial skill might exist other than at the top, it is hard to distinguish in its early stage from impractical ideas based on specious logic. As with invention and politics, nothing can attest to entrepreneurial ability better than past success.

Entrepreneurship is a difficult function to perform. It is a lonely job involving persistent thought, worry, risk, and the chance of ridi-

¹ Melvin E. Salveson, *The Modern Entrepreneur* (New Canaan, Conn.: CAM Press), p. 1.

cule and failure. It is often regarded as a disturbing influence upon a smooth operation and a great expense in money and executive time. It demands high motivation and, for incentive, usually a share of precious proprietary interest.

Although the entrepreneurial function is old, the awareness of it in education and systematic thinking is new. It is a particularly difficult phase of business for which to get textbooks or even case material. Business schools teach more how to serve as assistants and analysts to entrepreneurs, than how to act as entrepreneurs. Management literature seems to overlook the function of creating new business. Within industry, it is rare indeed to get on-the-job training in entrepreneurship. On the contrary, industry sometimes takes pains to "break in" new recruits, channeling any natural entrepreneurial drive into the "essential" activities described for the job.

Professionalization and socialization in business are detracting from basic entrepreneurial objectives. Professionalization channels thinking into separate pockets where emphasis is focused more on good techniques and less on ends. Socialization—the substitution of broad social aims for particular business interests—diffuses entrepreneurial incentives and tends to leave unused the potent driving force of personal gain.

IF ENTREPRENEURSHIP is the key for business in the 1960's, we ought to examine how we might overcome these negative factors and perhaps add a few positive ones. But first, let us look briefly at what the entrepreneurial function includes. First, the entrepreneur must himself conceive, or otherwise get possession of, a promising new business idea to take advantage of such potential as unfilled market needs, unused natural resources or process by-products, unused property, new invention, new application of technology, or joining of complementary business activities. This finding and early selection process can be objectively systematized, but personal alertness, intuition, and judgment remain important. Subjective interest and faith can also

direct finding and limit selection. Before the idea is fully developed, entrepreneurs of limited means must seek initial sponsorship to help provide investigative funds, specialized knowledge, and over-all judgment. The entrepreneur matches his creative, convincing vision to the sponsor's desire for gain and willingness to undertake a risk that, at this stage, is hardly more than a gamble.

To develop his idea further, the entrepreneur must determine what additional information is required and then get it. The range of information must be comprehensive enough to include everything that could have bearing on the success of the idea. Comprehensiveness is much more important than detail, for overlooking a single important area such as consumer acceptance, provision of utilities, or patents might ruin the idea completely, whereas detail can be resolved later by operating management.

As information that confirms original expectations is brought to hand, the entrepreneur designs the project. His design specifically spells out the market, lists assets needed to establish the business, gives man-power requirements, and estimates profitability. The entrepreneur usually can find technicians to do much of this work, but he himself must indicate the major characteristics of the business he envisions and follow up with inspiration and leadership in getting the means worked out. When one of many inevitable snags is hit, he either sees that it is somehow overcome, or accepts responsibility for compromising or abandoning the idea.

The final part of project design is business organization. This includes the legal entity, initial capitalization, directors, officers, nucleate staff, optioning of necessary land, process rights, and equipment quotations. The next step is to attract major equity capital and then complete financing with funded debt, bank loans, accounts payable, and so on. For the entrepreneur, this is the payoff, the formal acknowledgment by the investment community that his faith was well placed, that the project is sound.

Sometimes no further entrepreneurial ef-

fort is needed. A good project manager often can complete establishment, start up the enterprise, and deliver the anticipated profits. But sometimes snags develop, and it is still the entrepreneur's job to see that they are overcome. When the enterprise is at last in operation, the entrepreneurial job is usually finished. But it can extend itself or reappear if subsequent creative effort is needed to reassess the enterprise and imaginatively enlarge it through introduction of new business.

Now, let us return to what can be done to stimulate entrepreneurship. Three areas seem most promising: initial support, education, and attitudes within business.

Support is needed in the initial steps of the entrepreneurial process, which are to conceive the basic idea and obtain funds for its investigation. It should be remembered that the entrepreneurial function is not to invent new goods and services, but to take these things as they already exist or are discovered and put them together to build a new enterprise. In this we face a shortage of sound ideas, rather than a shortage of capital and other means. Improvement is needed in the availability of information that will inspire entrepreneurs and in the financing of initial investigation.

In overseas industrial development, the need for background information upon which to base new enterprise already has been recognized by public agencies. The UN Special Fund is preparing numerous background studies that will accelerate entrepreneurial action by many years, possibly decades. The U.S. Bureau of Foreign Commerce has made an excellent—and not fully appreciated—start on a similar class of knowledge. U.S. Operations Missions in some foreign countries have gone beyond basic background and even made preinvestment studies of specific opportunity for new enterprise, in some cases nearly in prospectus form. In the United States, however, this need for information has not been clearly recognized. Is it possible that we have been considering ourselves a fully developed country? Surely, our needs for the 1960's discredit any such complacency. Although some

development staffs of railroads, utilities, and local governments have made an encouraging start, the gap is large between the usual business publication full of miscellaneous intelligence and the more complete write-up integrating essential information in the form most useful to the would-be entrepreneur. Thus, a fruitful area for attention is the provision of up-to-date background information on such areas as resources, technology, and consumer wants that delves deeply into entrepreneurial possibilities.

When a basic entrepreneurial idea comes to mind, it is only an idea and, except for personal judgment and intuition, its economic feasibility is unknown. Therefore, at this stage, investigative expenditures cannot be considered a business risk; they are a sheer gamble. Even though such initial investigative expenses are but a small fraction of ultimate project costs, they are crucially difficult to finance because of the uncertainty at this stage. Let us make an analogy from mining. At the beginning, prospecting for minerals is all gamble. It is less so at the first strike. Finally, when orebody grade and tonnage are measured, the creation of a new mining enterprise becomes a simpler calculable risk, one that can be sold in the capital markets.

Are today's incentives sufficient to attract these gamblers on the scale needed? They are not. First, investigative expenses are not tax deductible unless actually part of an operating business. Then, if a successful new business results, high income tax rates severely fetter the very rapid growth by retained earnings that most new enterprises must have in order to succeed. It would be fairer to permit realistic deductions and to offset the abnormally high initial gamble with some special tax treatment during early operating years. An income tax holiday is one form often used in underdeveloped countries. All I can do here is point out the relevance of tax reforms for entrepreneurship.

If, however, rewards remain inadequate and cannot be improved, what else might be done? Established business and labor should see real benefits to themselves in helping sup-

port promising entrepreneurial investigations. They have a vital stake in stimulating entrepreneurship to build new enterprise, for this is most fundamental to increased productivity in established business. If this view can be taken, the design of a vehicle to carry out such a policy of self-interest—perhaps some sort of entrepreneurial grubstake—should not be too difficult.

EDUCATION can also contribute to the revival of entrepreneurship. In its broadest aspect, education too often timidly retreats from business realities, finding a haven in philosophy, liberal arts, and professionalism—anything to escape coming to grips with the competitive jungle of producing and distributing material wealth. Thus, for most of today's intellectuals, the business world is hostile and mysterious. The consequences of this unnecessary dichotomy are serious. Business gets lower quality college graduates and, far worse, these graduates bring with them an uncooperative disdain for their employer or soon surrender to lethargic conformity. Let us be realistic: Any man who has to work for his living is already a businessman. The kind of living that one makes from business depends on what he contributes to business.

All educational institutions should recognize and teach the importance of enterprise to society. Enterprise should benefit from the traditionally high intellectual perception and character associated with our best liberal arts colleges, for example. These virtues are needed to instill alertness to human needs, belief that individuals have a role to play, and personal courage to respond to challenge. Business schools in particular should inculcate the habit of viewing enterprise as a whole, not as just a series of specializations such as administration, accounting, marketing, and personnel. Even if this generalist approach means the dropping of some specialization, and perhaps a cut of \$50 per month in graduates' starting salaries, business schools have to realize that they are not trade schools; they are—or should aspire to be—training grounds for the future leadership of our country.

At the same time, however, education must improve its contribution to enterprise in theory building and in techniques. For example, a new school of young theoreticians could contribute much by developing fresh theories on entrepreneurship; on principles of patriotic leadership interchangeable among business, military, and government; and on exploiting motivation for self-gain to meet group requirements. Technicians could contribute procedures for quicker and less costly evaluation of entrepreneurial ideas, better ways to design new enterprise, and more effective devices to present this information to potential investors.

ATTITUDES within business can either stimulate or smother entrepreneurship, since the entrepreneur depends on business more than any other area of society for help in investigations, partnerships, and capital. Moreover, the cooperation of established business in raw material sources, manufacturing processes, and marketing outlets can often make or break his venture.

Too often, however, the would-be entrepreneur encounters suspicion or cautious indifference from established businessmen. Once a few key men are committed for the venture, followers come easily. To get the first is hard. The entrepreneur can offer no immediate benefits. He confronts the businessman used to comfortable, well-worked-out routine with uncertainties. The businessman is asked to risk not only his money and time, but also his personal reputation. Where this reputation has depended on avoidance of mistake and precise execution, rather than creative trial and error, it is never easy to view such an association with confidence.

Yet we live in an age where those who do not take risks will surely lose, while those who do might gain. And, in any society, the burden and the challenge of taking risks belong to the aristocracy. In the United States, top businessmen have won this privileged status. It is they who best enjoy security, freedom to think, freedom to venture—and certain moral obligations. For corporate directors and officers, mere sitting in formal approval and uncontest-

able judgment of subordinates' operations is insufficient. They must inspire, lead, set standards, and foster improvement. Their most important and difficult responsibility is the constant assessment of what their business really is, or ought to be. They must look to the future, engineer change, and shun the practice of decision by crisis.

When business bewails creeping socialism on the part of government, yet pays more attention to its own institutionalization than entrepreneurial growth, it strays from its fundamental purpose. The best way to compete with government for responsibility for the general welfare is for business to be passionately enterprise-directed and to keep economic activity at a fast pace. Then the citizen will have more confidence about handling his own affairs and be less satisfied to let his government—or his employer—take charge of his social security.

Thus, most of the burden and challenge of reviving entrepreneurship is going to fall on top businessmen, and it will not be easy. One sees this at the grass roots level where today's job-seekers merely look for vacancies to fill, forgetting that in the 1930's one could create a new job by offering some new contribution to the enterprise. The decline of the enterprising Yankee is even more apparent abroad, particularly in South America, where most United States citizens working locally are captive hirelings. By contrast, most Europeans there, particularly those with university training, have aggressively gone into business for themselves, many having now built up good-sized manufacturing enterprises. While business in a surprising number of foreign lands such as Japan, West Germany, northern Italy, Austria, Mexico, and Peru has surged forward on a broad front, the areas of entrepreneurial vigor in the United States are far fewer. Military electronics, leisure wear, insurance, and office systems, for example, have witnessed a growth that is amazing considering today's taxation and general indifference to the entrepreneurial function. But our economy needs across-the-board, not isolated, resurgence of enterprise. Once attitudes within business take into

account the importance of the entrepreneurial function, the exploitation of its usefulness can begin. It is too early to specify what paths will be taken—they may well be diverse, tailored to each situation. Some businesses seeking entrepreneurial modification and growth may stress the entrepreneurial analysis team, or corporate development staff. Some may have the chief executive push aside other functions to concentrate on entrepreneurship.

Perhaps an equally promising approach would be to recognize that entrepreneurial ideas are born in individuals, not corporations, committees, or staffs. In this light, established business would concentrate on those things it can provide best: encouragement, judgment for evaluating ideas, project development services, supporting personnel, credit, and, where feasible, arrangements for joint operations. It would make no attempt to assimilate the entrepreneur into regular administration until his work had advanced to the operations stage. In this way, the entrepreneur could come from anywhere and would work at his own pace while developing his idea. When attitudes have changed, business should be better able to answer such questions as:

Must entrepreneurship remain a top-level function, or is it possible and desirable to delegate it?

Should an individual with a promising idea be detached and allowed to work by himself, or should entrepreneurial ideas be handled by a special staff?

Should successful entrepreneurs remain to head operations, rewarded with good administrative titles, or can they somehow be recharged for further entrepreneurial work?

My vision is that business will become more and more receptive to entrepreneurial ideas. It will sponsor them and provide unique help to the entrepreneurs who will become a new breed with independent status in the business world. How this status will be earned is best characterized by the Spanish sense of the word for entrepreneur (*emprendedor*): one who undertakes new and difficult tasks with resolution.

Growth Plans for Executives

WHAT ARE the leaders of American business doing to equip themselves conceptually to meet the challenges of a world in the throes of explosive growth, upheaval, and change as it moves into the space age and toward the twenty-first century?

In the past, the desire to meet problems related to the increasing complexity of business initially gave rise to the now fast-growing field of professional business management.

A manifestation of the continuing recognition of changing times and developing management needs has been executives' increasing support of the executive education movement. This year thousands of executives will attend a wide variety of university, American Management Association, and company-sponsored programs. Subject areas will range from executive health and the art of public speaking to business policy. Some programs will place

heavy emphasis upon managerial accounting and other more traditionally accepted business school offerings. Others will deal almost exclusively with developing human relations and leadership skills.¹

The diversity of program subject matter is closely paralleled by the wide spectrum of methods utilized in management education work. At one company, the development efforts will consist of a program built around the method of simulated training; at another, the incident method; and at a third, role playing. There will be, of course, numerous courses emphasizing the more traditional case study, lecture, and group discussion methods.

Yet, with millions of dollars being spent yearly on these programs, the questions still arise: Are our executives preparing themselves

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¹This information is related to the author's research with Kenneth R. Andrews at Harvard University into the impact of university-sponsored executive education programs upon practicing executives. The report of this research is forthcoming.

to anticipate and handle the problems of tomorrow? Are company administrators able to foresee the future, as in times past? Have executives become so "action oriented" that they have tended to become conceptually bankrupt?

THE NEED FOR PLANNING

How much are practicing executives looking to their individual and corporate futures and conceptually and realistically preparing for them? To what extent do practicing executives have well-formulated concepts and objectives relative to both their personal and company growth needs?

No other segment of American society has such a great impact upon so many people as do the business leaders upon their subordinates and work forces. Not only is the influence of the business administrator very great within the country, but the image of American capitalism affects the opinions of millions of people abroad as to which type of economic system they prefer.

Men and women with differing ethnic, cultural, and educational backgrounds can find employment in American business and advance to higher salary and administrative levels through individual enterprise and ability. Such opportunity exerts a great motivational force upon the worker already on the job and moving up, upon the student who looks forward to the opportunity of succeeding, and upon people in other countries who aspire to a better way of life and are striving to find a workable socio-economic system that will make this possible.

Yet it is becoming increasingly clear that unless the American business executives establish realistic means of achieving their objectives, many of them will experience the frustration and disappointment of failing to move up the administrative ladder as they had anticipated. Moreover, in the quickening pace of modern industry, as companies make the necessary, often rapid, and basic adjustments

to the fast-developing, changing "state of the art," from both a technological and managerial standpoint, the administrator who has not followed a personal development program related to the emerging needs of his company may find himself bypassed or even replaced.

From a corporate standpoint, the company that does not plan for the continuing growth of its administrative personnel may find itself failing in the increasingly intense competitive struggle for survival and expansion. Effective management today is being regarded more and more as the "plus factor" making the fundamental difference in the futures of firms.

Administrators at the different levels of the company must have well-thought-out concepts and objectives concerning an integrated, consistent, systematic program of development from level to level throughout the organizational structure.

The promotion-from-within system and the positive benefits related to it also depend upon well-formulated plans and objectives. The many firms that seem opposed to discharging administrative personnel who have considerable tenure with the company should provide a progressive environment for their managers if the firm is to use effectively its executive personnel and remain in an advantageous competitive position.

CASE REPORTS

In order to develop greater insights into the personal and corporate management needs of practicing administrators, a series of case reports of management development concepts and plans of business executives were analyzed. Specifically, this research was concerned with both the personal and corporate concepts and plans of executives for achieving management development goals.

The findings of this research may be of interest both to educators in the area of executive education and to those company administrators who adhere to the philosophy of developing and promoting their managers from within the ranks of the firm.

Eighty-six administrators from one of the operating divisions of a large corporation were included in the case research. The majority of these had at some time worked for other firms and therefore reflected a relatively broad business background.

Of the 86, 43 were upper-level managers of the division and 43 held lower-level positions. All participants were drawn from the functional areas of engineering, manufacturing, and support (including all related functions such as finance, personnel, public relations, and so on).

Lower-Level Executives

In this research, the variable of age, always taken into account when considering men for positions, was found to be almost identical in the three lower-level groups with manufacturing and engineering averaging 41 years and support 43.

Another variable often related to position in the firm is number of years of service. An analysis of this factor indicated that all three lower management groups had been with the company for a relatively long time, although engineering averaged the least with nine years. Support averaged eleven years, and manufacturing averaged the most with fifteen years' service.

A look at the educational background of the groups as a factor related to their responses showed that only one person in manufacturing had received any college training. This individual held a B.S. degree. The level in the support group was higher with 25 per cent having had college work while another 38 per cent held bachelor's degrees. As might be anticipated, the highest level of education obtained was among the engineers, of whom 73 per cent had bachelor's and 27 per cent master's degrees.

These findings are significant, particularly in industries where historically there has been a noted disequilibrium in educational background. It perhaps could be expected that a

number of those in support and engineering might not feel the need for further training because of their previous educational attainments.

In manufacturing, however, where the educational level is lower and a greater desire for "educational legitimacy" might be expected, two factors could account for the failure of executives to understand engaging in management development. Either they do not see this legitimacy as being obtained through company efforts, or their own educational limitations narrow their perceptions.

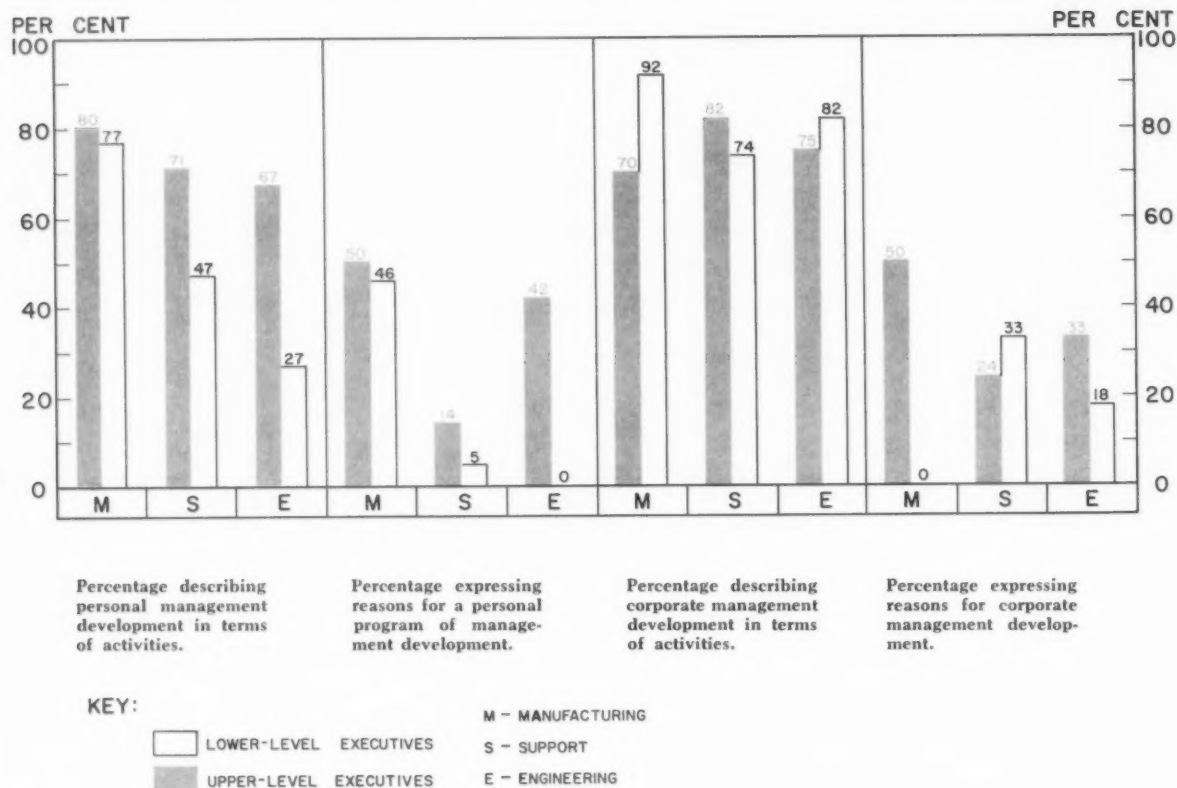
As shown in Figure 1, lower-level executives revealed a general failure to perceive management development in terms of the reasons why the company should be engaged in this type of activity. Only 33 per cent of those in the support function, 18 per cent of the engineers, and none of the manufacturing group expressed thinking in these terms. Those lower-level administrators whose perceptions of management development were in terms of *why* the company should be so engaged saw the firm's involvement in the activity as essential to its survival and growth. One executive felt that, "With the changing scene in products and markets, new demands will be placed upon the organization in all departments to adjust concepts and techniques. Management at all levels will be forced to adjust continually to meet new problems and situations." Another stated, "The program for the development of managers will decide the fate and future of the organization."

As illustrated in Figure 1, while no executives in the lower-level manufacturing groups felt the need to describe *why* the company should offer development programs, 92 per cent of this group specifically indicated *what* they felt the company should be doing!

The comparison is similar if somewhat less dramatic for the engineers and support personnel, with 82 per cent and 74 per cent of these two groups, respectively, describing management development in terms of specific activities.

FIGURE 1

Executives' Concepts of Management Development



According to the analysis, the activities most often favored were:

Activity	Percentage of Executives Responding
1 The current company-sponsored management program	51
2 Company-sponsored, advanced management programs	44
3 Establishment of a management reading room	26

Individual executives listed other items such as "provide monthly management newsletters," "establish a management incentive plan," and "provide mental health insurance," but these were not mentioned with any frequency.

There was evidence of very little thinking beyond the above three items. Not only had the majority of participants failed to analyze the reasons why the company should engage in a program of management development,

but they had done little systematic or imaginative thinking about what activities the company might be pursuing in its approach to a sound program of executive education.

Upper-Level Executives

The composite picture presented by the upper-level management groups was in some respects surprisingly similar to that for the lower-level groups. Manufacturing personnel were still slightly older than the other upper groups with an average age of 44 as compared with 43 years for support and 41 for engineering. The over-all combined average age of 43.6 years for the three groups was only one year above that for the lower-level groups. (This is an unfortunate situation in a company where the lower-level executives are expected to replace upper-level personnel as the latter

are promoted or retire.) In terms of the time spent with the company, manufacturing again had the longest average tenure, 21 years, while support and engineering counted 11 and 10 years respectively.

Although age and service differences between the upper and lower groups were relatively small, reactions as to *why* the company should be involved in management development work varied considerably, as can be seen in Figure 1. Half of the upper-level manufacturing personnel expressed opinions as to why the company should offer development programs. This was significantly greater than the proportion (33 per cent) for engineering or support (24 per cent) and represented a complete reversal from the situation existing among the lower-level groups.

Apparently, those manufacturing people who have been successful in moving further up the executive ladder have a broader concept of what constitutes management development and are more aware of a need for company-sponsored development programs than are their counterparts at the lower levels. (It well may be that some individuals who tend more to recognize the need for systematic management development work have advanced more rapidly than those who do not.) As previously inferred, a factor possibly related to this is the upper groups' cognizance of the limitations of their formal schooling, as contrasted with that of the other functional groups, and a realization of the need to make up for this educational deficiency.

The educational background of the upper-level groups was not unlike that of the lower levels, except in manufacturing. The amount of education among manufacturing personnel was still lowest: of the 20 per cent who had attended college, only half held the B.S. degree. Among support personnel, 24 per cent ended their formal education in high school, 24 per cent attended but did not finish college, and 4 per cent of the 52 per cent with bachelor's degrees went on to earn master's degrees. The engineers maintained the expected high

incidence in amount of education: all of them attended college, but 17 per cent did not finish, and 33 per cent of the 83 per cent with bachelor's degrees also had master's degrees.

Upper-level executives who were concerned with reasons why the company should be involved in management development activities focused upon the need for their administration to recognize and adapt quickly to the rapidly changing business environment. They felt educational programs were needed because the company management was:

- 1 Resting on past reputation
- 2 Totally immersed in its own dogma and unaware of changing needs
- 3 Afraid of competition in the commercial field
- 4 In need of developing greater perceptive abilities in order to exploit opportunities
- 5 Faced with the task of developing strength and ingenuity from within its organizational framework in order to compete successfully.

As one executive paraphrased it, "The coming decade of decreasing and shifting defense budgets and real 'knock-'em-dead' type of competition makes it an absolute necessity for us to sharpen our management capabilities and skills." Others commented: "I doubt seriously that we have the management capability to compete in a competitive world." "We somehow have got to stop being the big producer of the past and become the big competitor of the 1960's."

Among all the lower- and upper-level groups (except for lower-level manufacturing) there was evidence of basic concern over the need to educate in order to survive. The feeling that the company faced a tough challenge to its future and needed a well-informed and highly skilled management team guiding its destiny was often expressed.

As shown in Figure 1, the contrast between upper- and lower-level manufacturing groups was again apparent in the proportions of executives that described management development in terms of what specific activities

should be included. While manufacturing had the greatest proportion of persons perceptually oriented in this direction in the lower-level groups, the reverse situation was noted in the upper-level functional areas. The actual proportions—manufacturing 70 per cent, engineering 75 per cent, and support 82 per cent—not only contradicted the ratios observed in the lower-level groups, but also revealed a rather dramatic realignment in the positions of the three groups relative to one another.

In listing the specific management development activities the executives felt the company should undertake for the achievement of an adequate program, the upper-level groups evidenced both a greater degree of consensus as to what these activities should be and a generally broader vision as to the scope of items that ought to be included.

An exception to this was the executive who expressed the opinion that "the best managers are those who have met and conquered difficult situations. The test by fire is a requirement for advancement to upper management levels and must be recognized as an essential part of a management development program."

Those activities most often described in the participants' plans were:

Activity	Percentage of Executives Responding
1 Provide courses in basic management	41
2 Provide job rotation for management	41
3 Continue current management program for all levels	38
4 Provide courses in advanced management	29
5 Conduct meetings between lower- and upper-level groups to discuss plans, programs, and problems	26
6 Send to university and association programs	24
7 Supply management literature	18

While the upper-level groups achieved a broader basis of agreement as to the elements that should be included in a management development program, the study did not reveal

their thinking to be necessarily more integrative or systematic than that of the lower-level groups.

Basically, the executives at both levels tended to see management development as comprised of discrete activities. Their thinking followed traditional notions about management development, which was equated with or related to particular courses of study or techniques, rather than being conceived of as based upon the "felt needs" and long-range objectives of the individual and the firm.

THE PERSONAL PLAN

As the second dimension of the research, each participant formulated a personal plan for management development. The research was again left completely unstructured in order to give each executive the opportunity to elaborate what he perceived as constituting management development. The analysis revealed some sharp variations in their thinking.

While the lower-level manufacturing executives failed completely to see *why* the company should be involved in management development, they were considerably more cognizant of the reasons why they personally should pursue such a program. As seen in Figure 1, 46 per cent of this group listed specific reasons for engaging in a personal development program. Amazingly enough, there was an almost total absence of orientation in this direction among those in support (5 per cent) and engineering (none).

In the upper-level groups a somewhat different picture appeared. Manufacturing again had the highest proportion of executives (50 per cent) who thought in terms of reasons why they should be involved in personal programs of management development. This was somewhat higher than the percentage (46 per cent) noted in the lower-level manufacturing group and exceeded that found in the two other upper-level functional areas.

Engineering rose from a zero percentage in the lower levels to 42 per cent of the upper

group in expressing cognizance of the reasons for personal development activities. In the support area a minor contrast was observed with 5 per cent in the lower-level group and 14 per cent in the upper-level group.

Although a percentage increase was noted among all upper-level groups when compared with the lower-level groups, it is nevertheless significant that in no instance did the proportion of executives expressing an understanding as to why they should pursue a personal program of management development exceed 50 per cent.

The greater number of upper-level executives who appreciated the need for personal development probably did so because their jobs entail more practice of the management functions with a resulting greater felt need for proficiency in the exercise of management skills and less emphasis upon technical excellence.

For example, in engineering where the most significant change was noted, the lower-level executives may see no reasons for planning for the development of greater managerial capacity in view of the technical and specialized nature of their jobs. However, as they reach upper management levels, engineers may recognize increasingly that such personal development planning is essential if they are to function effectively in their present jobs and move still higher on the management ladder. It is also possible that upper-level managers hold their positions because they are aware of the reasons why they should pursue a personal program of management development and have done something about it.

As might be anticipated, the number of executives who described personal management development in terms of "activities" was significantly higher at all levels and in every functional area than the proportion of administrators who thought in terms of reasons why such planning should be done. This is shown in Figure 1.

There was a surprising variation in the number of executives in the different lower-level

groups that described their personal development plans in terms of specific management activities. Corresponding to the same pattern observed earlier when executives were conceiving company plans, the lower-level manufacturing groups had by far the largest proportion (77 per cent) "thinking" in terms of activities. Those in support and engineering oriented within this framework comprised 47 per cent and 27 per cent of their groups respectively.

Among upper-level executives the same relationship among the three groups was evidenced in describing development in terms of activities. Again manufacturing predominated with 80 per cent as compared with 71 per cent for support and 67 per cent for the engineers.

Allowing for the overlap in responses occasioned by executives who described their plans both in terms of reasons and activities, the proportion who conceived of development as activities far outweighed the number who



perceived it within the framework of personal needs and opportunities for growth.

The lower-level executives listed twenty different activities in their personal development planning. However, only three of these were indicated with any frequency. These were:

Activity	Percentage of Executives Responding
1 Read management literature	41
2 Attend university-sponsored management development programs	27
3 Apply the ideas gained in the current company-sponsored management program	14

The upper-level groups listed forty-four different activities equated with personal development. Again, however, only three of these were consistently referred to. These were:

Activity	Percentage of Executives Responding
1 Attend future, outside-of-plant, university-sponsored management courses	68
2 Read and study management literature	48
3 Apply the ideas learned in the present in-company management program	29

IMPLICATIONS

The majority of the executives in the study simply wanted to "get ahead." This ambition is often reinforced by the expectations of executives' families, associates, friends, and in some instances their community groups. Yet the desire and pressure to "move up" proved to be surprisingly diffuse and undefined. Very few of the executives were heading toward a specific goal that they had established for themselves. Rather, they felt a general need to get ahead as their years with the company increased.

They appeared to operate within the framework of a "self-image" molded by influences external to the individual, both inside and

outside the plant. Supplementary information indicated that when periodic advancements failed to occur, and when difficulties relative to handling the present job arose, this self-image tended to become shaken, resulting in frustration and a developing lack of self-confidence.

A majority of the men came into the industry or company with motivations other than one of being a manager. They started in some technical capacity and over a period of years were gradually moved into management.

Not only did the participants in the research fail to express clearly defined personal objectives, but the majority were unrealistic in terms of attaining even the general aim of getting ahead. This was indicated in the research when they revealed a lack of thought about why they themselves or the company should be pursuing a program of management development.

While the majority of the executives were oriented toward activities when they thought of growth, they were not systematic even in this approach. They did not present logical, integrative series of activities planned so as to provide for any sort of consistent satisfaction of personal or company needs. Some conceived of management development as synonymous with a particular course of study, while others thought of it as consisting of two or three, not necessarily related, activities.

The lower-level groups were considerably less cognizant of personal and company management needs as expressed through their lack of "reasons why" responses than were the upper-level groups. Moreover, the upper-level executives were more systematic and expansive in their perceptions of management development activities than were the lower-level groups. Nevertheless, while the upper-level groups did perceive management development somewhat more broadly than the lower-level groups, there was considerable evidence that a large majority of the executives at both levels had relatively narrow conceptions of what management development

involved. While not typical of this group, one upper-level executive described his strategy for personal management development as: "To prepare myself to do a good job, to obtain challenging assignments and do a good job, and to see that higher management knows I did a good job, and that I am ready for bigger assignments."

None of the executives conceived management development in its broadest sense as constituting the process through which managers perform their staffing function. They failed to express recognition that they themselves shared basic responsibility for the development and success of any program of management education, and that the chief executive officers of the firm had ultimate responsibility in any such effort.

There was considerable evidence that many of the participants in the research also failed to comprehend fully the extent to which an adequate program of management development is related to the survival and future growth of the organization. Nor did they foresee the complexity of the process of carrying out such a program—the fact that it requires, among other things, "a careful review of personal needs, the discovery and testing of alternative ways to achieve the enterprise objective in this regard, a settlement upon the most appropriate plan, and a full-scale backing of the selected program."²

The findings of the research again raised a basic challenge to the promotion-from-within system. While companies may recognize the obvious advantages of such a system and commit themselves to its continuance, they nevertheless must face the problems incident to making a competent professional manager out of a man who spent the first years of his career in a position suited to his technological capabilities.

The study revealed that the lower-level



managers were approximately the same age as those in the upper-level groups. Yet there were noticeable differences in the degree of development of the two groups in their understanding of and present ability to discharge the staffing function.

If the upper-level managers of the company wish to move up the executive ladder, their subordinates in the lower-level groups need to have opportunities for further development based upon their needs and the demands of future positions they may be expected to assume.

If company promotion-from-within policies are to succeed, it is important that they be related to sound, integrated, and consistent programs of management development. The sporadic "odds and ends" or "hit or miss" approach to such activities is largely a waste of company funds, for it does not provide an adequate supply of trained professional managers upon which the firm can rely to satisfy its future replacement and growth needs.

Frequently the company aim of development through-the-ranks to fill its management

²Harold Koontz and Cyril O'Donnell, *Principles of Management* (2d ed.; New York: McGraw-Hill Book Co., Inc., 1959), p. 382.

positions achieves only partial fulfillment not because of the unfeasibility of the goal, but because of a lack of understanding (or perhaps inadequate definition) of the company's basic development objectives and a failure to formulate and support realistic means for achieving the necessary management growth.

In this regard, it has been pointed out that the ultimate objective of management training "is to encourage the development of men in whom others have confidence," that "confidence rests upon the security which men of judgment can provide," and that managerial training is properly "an effort to provide knowledge and experience, an integral part of the material needed for the development of judgment."³

The achievement of the objective of providing knowledge, experience, and insights, leading to greater skills and better judgment in the performance of the management functions, is a necessary concern of every firm that desires to compete successfully.

To accomplish this, or any other development aim, companies must recognize the ex-

tent and nature of the process involved in the transformation of technical workers into professional managers and accept responsibility for the formation of management programs realistically designed to achieve their objectives.

In today's dynamic world, companies recognize the importance of keeping abreast of technological advances. But to what extent do companies and individuals realize that their management development plans are affected each time a decision relative to a technological development is made?

The firm that sets out on a course of diversification, for example, needs to consider the effects of this upon its plan for the development of its administrative personnel. The growth-oriented individual also needs to consider this trend to diversification as he formulates his own development program to achieve his personal management goals.

The extent to which individuals and companies understand and foresee the influence of advances and change upon their management development programming will have a basic impact upon the individual's opportunities and the firm's prospects for future growth.

³*Principles of Management*, p. 360.

I CALL, therefore, a complete and generous education, that which fits a man to perform justly, skilfully, and magnanimously, all the offices, both private and public, of peace and war.

—John Milton
ON EDUCATION

Case Study

DILEMMA OF THE INDEPENDENT DAIRY

FOR THREE generations, the Cassner family has been engaged in the dairy business in Cincinnati. The original company, the Henry Cassner and Sons Dairy Company, moved into the city from a nearby community early in the century. In 1929, the family sold out to the Supreme Dairy Company; included in the contract was a clause prohibiting them from re-entering the dairy business for five years. John Cassner was appointed the first president of the local subsidiary of the Supreme Dairy Company; however, he later became dissatisfied with the situation, and, at the end of the five-year period, he and other members of the Cassner family associated with the Supreme Dairy Company withdrew from that organization. In September, 1935, they incorporated the John Cassner Dairy Company and opened business in their present location at the corner of Summit Avenue and

27th Street. J. Charles Cassner, Sr., now president of the company, is the only one of the original incorporators still active as of January 1, 1961.

When they resumed operations on their own account, the Cassners had no distribution system and owned only four or five trucks. To build trade, their route salesmen had to make door-to-door solicitations. They had, however, the advantage of the favorable reputation that the family had built up over the years. John Cassner was often spoken of as the pioneer dairyman in Cincinnati; like his father, Henry Cassner, he had constantly endeavored to deliver a quality product. Although butter had always been an important company product, John Cassner's chief ambition was to establish the dairy as a leading supplier of fluid milk to the home. To maintain the quality of the firm's product, a younger brother, Walter Cassner, took charge of the laboratory, and a sample of each batch of milk was tested for butterfat content and bacteria count. Before the outbreak of World War I, John Cassner had natu-

The data for this case study were collected by the Case Research Unit of the School of Business, Indiana University, and prepared by Glenn D. Babcock.

ral ice shipped from Lake Michigan to his dairy, and he is said to have been the first dairyman in Cincinnati to use ice in refrigerating fluid milk.

Both he and his son, J. Charles Cassner, Sr., were active in civic affairs. This fact stood the firm in good stead in its endeavor to regain the position it had held before selling out to the Supreme Dairy Company. By the end of World War II, the John Cassner Dairy Company had become the second largest dairy in the city.

COMPETING COMPANIES

At one time, the Supreme Dairy Company was reported to have over 50 per cent of the fluid milk business in metropolitan Cincinnati, an area that includes Covington and Newport in Kentucky as well as neighboring Ohio cities. Recently, however, it has been losing ground to competition. Paul Andrews, general manager of the Cassner Dairy, says that about thirty-five dairies opened in Cincinnati during or immediately after World War II. Since then, other large dairy processors have entered the Cincinnati market. By the end of 1959, three other large concerns—Sherman Dairies, Henderson Milk Company, and the Nettleton Dairy Company—had acquired plants in the area and were in competition with Supreme and the smaller local dairies.

Sherman Dairies came into the city in 1952, and Andrews estimates that by the beginning of 1961 it supplied 20 per cent of the Cincinnati market. In January, 1958, the Henderson Milk Company bought a Covington dairy company, and in April, 1959, it purchased the Barrett Dairy in Cincinnati. Annual sales of the Barrett Dairy, according to Andrews, had been about \$1 million—not large enough for profitable operation of the plant. Therefore, it was closed by the new owners, and its production transferred to Henderson's Covington plant. Before 1960, the Nettleton Dairy Company had confined itself to producing butter for the local market and had not distributed fluid milk in the Cincinnati area. In 1960, how-

ever, Nettleton bought out two independent dairies in the city, then closed two of the three plants it had acquired and concentrated production in the third.

Share of Market

The total consumption of fluid milk in the Greater Cincinnati area for January, 1961 was reported at 36.2 million pounds. Andrews estimates that about one-fifth of the total was distributed in outlying cities, leaving about 31 million pounds for Cincinnati and the immediate vicinity. During the same month, the members of the Milk Marketers Association, a nonprofit organization of all the dairies in the area with the exception of the Supreme Dairy Company and Sherman Dairies, had reported consumption of 15.5 million pounds.

If Andrews' estimate of one-fifth for the outlying cities to four-fifths for the metropolitan area is correct, the members of the Milk Marketers Association sold about 12.7 million pounds of fluid milk in the city in January. This would mean that Supreme and Sherman together had in that month accounted for something over 50 per cent of the Cincinnati city market. When asked to allocate the other 50 per cent, Andrews said he thought the Henderson Milk Company's sales were about 8 per cent and Nettleton's perhaps 10 per cent of the total, with the remaining 32 per cent divided among the independent dairies.

By January, 1961, the thirty-five independent dairies that had existed in the area immediately after World War II had been reduced to thirteen firms; none operated more than one plant. The mortality had been most pronounced during the last five years, and four firms had been forced either to sell out or close down in 1959 alone. It is Andrews' opinion that the development of supermarkets with large refrigerated display cases for dairy products caused independent dairies to lose control of their market. He says the average independent dairy is not large enough to take on the local business of one of the national grocery chains. One dairy did attempt to do so, but tying up too great a percentage of its sales in

the one outlet proved disastrous for the firm. Andrews claims that the independent dairies are limited to the home delivery market, plus sales to neighborhood grocers, restaurants, smaller chains, and some institutions.

PRICING FACTORS

In 1946, the prevailing Cincinnati price of a quart of milk delivered to the home was 26 cents, or 52 cents for two quarts. There was no half-gallon price at that time. At the present time, according to Andrews, two-thirds or more of the deliveries are half-gallons priced at 47 cents, a decline of 5 cents in four years, and of 1 cent from January, 1960. At the supermarket, the Cincinnati housewife pays 42 cents a half-gallon. Smaller groceries charge from 42 cents to 45 cents. Neither the dairy nor the customers are happy with the higher delivery price, but, as far as the dairy is concerned, the expenses of delivery have to be met.

Drivers for the Cassner Dairy Company are paid 1 cent a "point." They acquire one point for the sale of each quart of milk; points can also be gained for the sale of various dairy products—for example, one point per pound of cheese. Drivers are also paid 12.25 per cent on collections. This brings the combined payments to about 16 per cent of sales. Since 1956, Cassner's drivers have worked a five-day week, which means that for every five drivers a "swing" driver is hired. The total direct selling expense of home delivery, therefore, amounts to 19 or 20 per cent of sales.

To chains under common ownership, Cassner's discount is 11 per cent. At the present time, the company has only one small chain of five stores on its books, but it has hopes, according to Andrews, of selling to a chain of "superettes" being started in the area. Individually owned stores are given a discount of 7 per cent. Andrews mentioned that the Supreme Dairy Company and Sherman Dairies allow a discount of 11 per cent to buying groups of independent stores, such as the IGA group. Since he believes the buying office usually keeps 4 per cent for its services, he con-

siders Cassner's discount of 7 per cent to the individual member of the group on a par with the competitors' quotation. However, he does feel that the higher discount rate has a psychological effect.

Material costs, as well as labor costs, have increased. Prices for fluid milk paid to producers in the federal milk marketing area in which Cincinnati is located are based on the highest of seven "formula prices"—using the milk-butter ratio, milk-cheese ratio, and similar measures—and have been adjusted to maintain a reasonable relation between the costs of things bought by the producer and the price he receives for his product. The base price in March, 1961 was \$4.71 per hundred pounds, an increase of 29 cents from March, 1960. Also, effective March 1, 1961, the amount added to the base price was raised from \$1.25 to \$1.30. Producers had asked for an increase of 25 cents, but the Milk Marketers Association had argued on behalf of its members that no increase was necessary since the current surplus of milk and milk products indicated that producers had found the current equating amount adequate. Andrews says he does not begrudge the increase that has been granted since it was the first time in fourteen years there had been any increase in the equating amount added to the base price.

Andrews has reported to the president of the company that the reduction since January, 1960 of 1 cent in the delivered half-gallon price had cut income for January, 1961 by \$10,000 and in conjunction with the higher labor rates and increased costs of materials had reduced the Cassner Dairy's income for the month by \$12,500.

Dairies in the Cincinnati market suffered in 1960 from two costly price wars. In March, 1960, a price war brought the half-gallon delivered price down to about 41 cents. The war lasted from March 1 into the second week in April when the price rose to 45 cents. On August 22, 1959, another price war lowered retail price for two half-gallons to 65 cents. Not until about October 1 did prices return to a normal level. After reviewing the sales

figures, Andrews had estimated the two wars had cost the Cassner Dairy approximately \$105,000.

Such wars, with retail prices for fluid milk cut below cost of production and distribution, seriously weakened the working capital positions of some of the smaller dairies. In fact, according to Andrews, working capital troubles were responsible for the decisions of four dairies to sell out or discontinue operations in 1959.

Andrews claims that the March war was brought about by a 2 per cent concession that Sherman Dairies made to a national chain of grocery stores in order to get their business. Sherman had argued that the 2 per cent discount was in consideration of "earned services"; supposedly, employees of the grocery chain would take delivery of the milk at their loading docks and place the milk in the refrigerated cases, thus saving the Sherman drivers the trouble of performing that service. Andrews contends there was no actual saving to Sherman since he believed Sherman's union contract required the firm to pay the drivers the same commission as before.

The Cassner Dairy Company and four other dairies filed charges against the Sherman Dairies and the grocery chain under the Robinson-Patman Act, claiming discrimination and selling below cost with the intent of damaging the business of competitors. The Federal Trade Commission sent an investigator to Cincinnati and took testimony, but as yet no decision has been made. Andrews declares that any benefit derived from the hearings was psychological; the hearings uncovered the fact that other large grocery chains had not received the same concession from Sherman. Andrews also mentioned that Sherman Dairies had been the defendant in four similar cases during the last eight years.

PRESENT POSITION

The Cassner Dairy probably has the most aggressive selling program of any of the independents. In spite of the severe competitive

situation, it increased its share of the market from about 7.0 per cent to somewhere between 7.5 and 8.0 per cent during 1959. Andrews declared that J. Charles Cassner, Sr. was almost entirely responsible for this increase in sales.

In March, 1960, Cassner operated 45 home delivery trucks in the Cincinnati area. In addition, the dairy had ten wholesale routes delivering to stores, restaurants, and institutions within the city, and other trucks delivering to stores and distributors in Hamilton, Morrow, Batavia, and Harrison, Ohio. The Covington and Newport areas were also serviced by home delivery trucks. Good results had been obtained from sales contests conducted between groups of drivers for relatively short periods. Usually, one of the more competitive drivers spurred the efforts of the other members of the group. Attractive point-of-sale material was furnished to wholesale accounts, and newspaper ads were used regularly.

From the firm's beginning, butter has been one of the major products sold by the Cassner Dairy. In recent years, in addition to sales of such items as cottage cheese, yogurt, chocolate milk, and orange drink, Cassner has sold to ice-cream plants a large volume of "mix" (the unfrozen constituents required for making ice cream). The mix is prepared by Cassner in two basic flavors, vanilla and chocolate, and any fruit or other flavors are added by the ice-cream plant. The sale of these related products has made important contributions to Cassner's sales volume. (Financial data for the company are shown in the accompanying balance sheet, comparative summary, and comparative statement.) However, neither J. Charles Cassner, Sr. nor Andrews believes that the Cassner Dairy or any one of the other independent dairies in Cincinnati can, by itself, successfully cope with the competitive situation much longer. Their reasons for thinking so are these:

1 More and more families are buying their milk and related products, such as butter and cheese, from supermarkets supplied by the large dairy companies. None of the independent dairies is in a

JOHN CASSNER DAIRY COMPANY

Balance Sheet, June 30, 1960

Assets

Current assets

Cash		\$107,600
Notes receivable and accrued interest		7,300
Accounts receivable	\$ 361,700	
Less: Provision for doubtful accounts	15,400	346,300
Inventories		
Finished and in process	30,700	
Merchandise purchased for resale	4,400	
Manufacturing supplies	12,100	
Packing and shipping supplies	53,900	
Plant supplies	3,000	104,100
Total current assets		<u>565,300</u>

Other assets

Notes and accounts receivable—affiliated company	18,900	
Other accounts receivable—noncurrent	11,600	
Prepaid expenses, etc.	9,200	39,700

Plant and equipment

Land	21,500	
Buildings and equipment	1,045,600	
Total at cost	1,067,100	
Less: Accumulated depreciation	679,700	387,400

Good will—Routes purchased

700

Total assets

\$993,100

Liabilities and Capital

Current liabilities

Notes payable		\$ 12,300
Accounts payable		
Milk purchases	\$ 100,800	
Miscellaneous purchases and expenses	124,700	
Employee payroll deductions, etc.	33,900	259,400

Accrued liabilities

Salaries and wages	33,600	
Taxes	7,600	
Fees, interest, and insurance	4,400	45,600

Total current liabilities

317,300

Notes payable—Due after one year

158,700

Capital

5% cumulative preferred stock—\$100 par value	50,000	
Common stock—\$100 par value	97,700	
Retained earnings	369,400	

Total capital

517,100

Total liabilities and capital

\$993,100

JOHN CASSNER DAIRY COMPANY**Comparative Summary of Operations
For Years Ended June 30**

	1958	1959	1960
Sales			
Graded milk and cream	\$2,848,000	\$2,684,000	\$2,687,800
Raw milk to other handlers	97,900	284,300	561,800
Manufactured products	1,084,500	1,187,100	1,248,400
Eggs	96,600	102,200	88,600
Miscellaneous	42,700	56,300	86,600
Gross sales	4,169,700	4,313,900	4,673,200
Less: Returns, allowances, and freight out	68,600	67,500	75,900
Net sales	4,101,100	4,246,400	4,597,300
Less: Cost of goods sold	2,955,600	3,128,700	3,449,900
Gross profit on sales	1,145,500	1,117,700	1,147,400
Expenses			
Selling expenses	745,100	735,300	738,500
Auto and truck fleet expense	203,400	220,200	208,200
Administrative expense	204,800	194,900	190,400
Retail stores expense	8,600	7,200	7,200
Total expenses	1,161,900	1,157,600	1,144,300
Income (or loss) from operations	(16,400)	(39,900)	3,100
Other income and (deductions)—net	(21,900)	(1,600)	(19,100)
Net income (or loss) before income taxes	(38,300)	(41,500)	(16,000)
Federal and state income taxes (or refund)	(17,200)	(14,100)	0
Net income (or loss) after all charges	(21,100)	(27,400)	(16,000)
Retained earnings—beginning of year	433,900	412,800	385,400
Totals	412,800	385,400	369,400
Less: dividends paid	0	0	0
Retained earnings—end of year	\$ 412,800	\$ 385,400	\$ 369,400

position to take on by itself the local business of the chain supermarkets.

2 Although the John Cassner Dairy Company is the largest of the independent dairies in Cincinnati, it does not have sufficient volume to operate some of the labor-saving equipment used profitably by the large companies. Both Cassner and Andrews are positive that substantial savings in production costs could be accomplished if it were possible for the company to increase its volume sufficiently to justify the investment in additional labor-saving equipment to be installed in a plant scientifically designed for the production of dairy products. Their belief is

supported by an industrial engineer familiar with dairy operations; he has stated that production costs could be cut almost 50 per cent at a sufficiently high level of production.

Additional savings could be effected by merging delivery routes and eliminating the overlapping that now exists. While the potential savings are estimated to be less dramatic than those possible in the production area, the reduction in distribution costs could be substantial.

3 Frequent price wars have consumed the working capital of the independents who could not recoup their local losses by sales in other market areas.

JOHN CASSNER DAIRY COMPANY
Comparative Statement of Cost of Goods Sold
For Years Ended June 30

	1958		1959		1960
Cost of goods processed and manufactured					
Raw materials purchased					
Graded milk and cream					
From shippers	\$1,994,300	\$	\$2,124,200	\$	\$2,068,200
Bottled by other dealers	0		0		302,600
Ungraded milk and cream	11,000		4,900		40,400
Eggs	73,600		80,200		66,400
Ice cream	27,900		21,300		28,100
Butter	23,200		24,400		58,600
Other	2,600		1,700		25,100
Total raw materials purchased		2,132,600		2,256,700	2,589,400
Miscellaneous materials used		123,200		132,000	141,600
Container and packing supplies used		168,800		168,900	162,700
Plant expenses					
Salaries and wages					
Processing and handling	190,200		190,000		185,000
Packing	35,700		33,900		33,800
Other	67,400		69,700		68,100
Total salaries and wages	293,300		293,600		286,900
Operating supplies	45,700		58,200		56,200
Repairs and maintenance	31,800		29,700		23,200
Insurance	6,300		5,200		4,600
Payroll and property taxes	13,900		12,900		12,800
Depreciation on buildings and equipment	36,100		39,000		39,600
Services purchased	40,600		46,100		39,900
Other expenses	41,900		42,600		29,600
Truck expense—portion	1,500		1,500		1,500
Total plant expenses	511,100		528,800		494,300
Less: Building expense transferred	400	510,700	400	528,400	400
Cost of goods processed		2,935,300		3,086,000	3,387,600
Inventories—finished and in process					
Beginning of year	22,400		34,100		31,600
End of year	34,100	(11,700)	31,600	2,500	30,700
Cost of processed goods sold		2,923,600		3,088,500	3,388,500
Cost of merchandise purchased for resale		32,000		40,200	61,400
Cost of goods sold		<u>\$2,955,600</u>		<u>\$3,128,700</u>	<u>\$3,449,900</u>

In view of their unhappy experience when the Henry Cassner and Sons Dairy was sold to the Supreme Dairy Company, the owners of the John Cassner Dairy do not wish to sell out again. On the other hand, the existing Cassner plant is not large enough to absorb the additional volume that would result if they purchased even one or two of the larger independent dairies. Furthermore, because the Cassner building adjoins city-owned property and is situated on a corner, expansion at its present location is practically impossible.

Mergers have been considered, but each of the independent dairies is a family-owned firm with its individual family situation and problem. Even if the independents wished to sell to the larger dairy firms, Andrews says that some of the latter are under court orders not to acquire any new dairies unless the purchase is approved by the court or the FTC. Consequently, the independent dairyman might not readily find a purchaser for his property.

Comment *by Albert Haring*

For the last three years, the John Cassner Dairy Company has had a deficit. Moreover, significant financial improvement appears unlikely without basic changes in the company's operation. Several problems face the company.

First, Cassner's market is deteriorating. Cassner has emphasized the home delivery of milk and butter. Milk can be purchased, however, at a lower price in supermarkets, and, as a result, customers are buying more and more of their requirements in these stores. This decline in the home delivery business limits not only the sale of milk but also the market for selling butter. Furthermore, butter is gradually being replaced by lower priced margarine. Thus, Cassner's has little opportunity to expand in the market segment in which the company has specialized in the past.

A related problem concerns the rise of the supermarket, particularly the concentration of

business in chain supermarkets in Cincinnati. With limited capacity, Cassner is unable to contract for the business of any major chain or of a major voluntary group. Although individual stores are now served, expansion of this market is limited by productive capacity.

Second, production costs are unduly high because of antiquated equipment. An estimate suggests that the Cassner company could reduce its production costs by about one-half if a plant with modern equipment could be set up. The data indicate that such modern equipment is expensive and would require a substantially greater output than Cassner now sells in order to operate at minimum per unit cost. In the Cassner Dairy's current location such modernization appears to be impractical.

The narrow margins in the milk industry and the importance of cost are shown clearly by the general manager's comment about January, 1961 operations. Andrews stated to J. Charles Cassner, Sr. that a drop of 1 cent in the delivered half-gallon price had cut the company's revenue for that month by \$10,000. Since this reduction had been in effect since January, 1960, the impact on operating results for all of 1960 would involve the loss of well over \$100,000 in prospective revenue. Cassner's actual 1960 loss of \$16,000 could thus convert into a 1961 profit of \$100,000 or more if production costs could be cut 1 to 2 cents per half-gallon.

The price wars during recent years are also significant. The major producers in the Cincinnati area, operating with modernized plants close to capacity, may well have been able to make a profit during these price wars that hurt Cassner badly. Even though these price wars involved cuts in price up to 5 cents per half-gallon of milk, low production costs and economical supermarket distribution certainly lessened the impact of price cutting on the larger operators.

Third, Cassner has a problem in distribution. The direct selling cost on routes is 19 to 20 per cent of sales. The regular drivers are paid a combined amount that equals about 16 per cent; in addition, drivers work five days

with a substitute handling each route when the regular driver has a free day. This direct selling cost is a significant factor in Cassner's failure to make an adequate profit. Since the route business already has an unfavorable price differential of 5 cents per half-gallon, economy in this area seems absolutely essential if it is to yield profits during the next decade. One approach would be to deliver less frequently; another possibility would be to compromise with drivers on compensation.

The Cassner Dairy Company has a fine reputation in the Cincinnati market. J. Charles Cassner, Sr. has a strong personality and seems to have been instrumental in developing, and even expanding, the route business. If and when he ceases to be active, there is a probability that the route business will decrease. His personal efforts appear to be the key factor in maintaining the company's route business at a time when the public has shifted much of its patronage to supermarkets.

Fourth, the Cassner business in mixes and other minor products appears profitable. This should be continued, but it does not seem to offer the opportunity for expansion adequate to move the whole company into a profit-making position.

The price and profit outlook is not encouraging. Price wars and the closing down of a number of small dairies during the 1950's did not stabilize prices. This tendency of prices to drop and these periodic price wars would seem to indicate that there are more firms in the milk industry than the Cincinnati area needs. As a result, there is little likelihood that the prices of route-delivered milk can be increased without decreasing volume. Moreover, the general price of milk would appear more likely to fall than to rise. With virtually no hope of a reduction in raw material cost, this means a tighter future margin for the company. Under the circumstances, even if certain other minor producers should drop out, there does not appear to be any simple and easy program by which the Cassner company can convert a loss into a substantial profit.

SEVERAL courses of action are open to the Cassner company. These will be briefly summarized.

1 The company can withdraw from business. It has been running a deficit for three years, and the equipment appears to be somewhat antiquated. Although adequate information about the value of the real estate is not available, withdrawal from business would appear to involve a substantial loss in terms of book value. In addition, J. Charles Cassner, Sr. and other members of the family would lose a means of livelihood. This is an unattractive solution.

2 The company can sell out. Even if the legal difficulties are ignored, selling at this time is not attractive. Under ordinary circumstances, a buyer makes an offer on the basis of capitalized earnings or the depreciated value of assets. Since the company has not been operating at a profit, capitalizing earnings gives negligible value. Since the equipment is not up to date and relatively high in cost, liquidating this would also appear to yield relatively little. If at all possible, the company should be operating at a profit before any effort is made to sell.

3 The company can consider buying competitors. The recent losses of the Cassner company and its capital position would not seem to show sufficient financial strength to permit the company to buy out two or three smaller competitors and then to modernize production in one plant. While this is a desirable solution, it appears to be financially difficult.

4 Considering the personality and the history of the independent companies and the Cassner company, a merger or consolidation would appear to have limited chance of success. The milk companies in Cincinnati appear to be independent in attitude, personalities, and policies as well as ownership. Of necessity, these men might cooperate, but the outlook for four or five companies getting together and merging their identities and executives is not attractive.

5 Cooperative production by the independent companies is a possibility. The data pre-

sented in the case suggest that Supreme has about 30 per cent of the Cincinnati market; Sherman controls about 20 per cent; Nettleton has 10 per cent; and Henderson has 8 per cent; this means that thirteen independents have around 32 per cent of the market. Of these, Cassner is the largest, controlling almost 8 per cent of the Cincinnati market in 1960. Supreme and Sherman appear to have modernized plants that give real economy in production. Nettleton and Henderson may have efficient production through shipping milk to other areas; this is difficult to determine.

Certainly, the independents as a group have enough volume to warrant the erection of a completely modern, high-capacity plant, which would enable them to market sufficient volume to secure minimum production costs. Packaging could be by individual company brands, and distribution could be handled separately. By consolidating production, a significant saving to all companies would be secured so that continuation of the current route system would be profitable even though its market share is shrinking. In addition, each of the independent companies could solicit supermarket, voluntary chain, and chain store business until the new production facilities approached capacity. If the other independents have a financial position comparable to Cassner's, this would convert them to a profit position. Then, if consolidation appeared de-

sirable, the independents could secure much better values for their companies. Cooperative marketing could be undertaken to avoid route duplication and to cut down the number of extra drivers required.

There is, however, one outstanding problem. The loss of individual identity could create significant antagonism. Although cooperative marketing by the independents appears to promise a great deal, the practical matter of human relationships makes this a difficult step to take.

BY FAR the most practical, broad solution to the Cassner problem appears to be low-cost cooperative production in a large modernized plant operating at a high rate of capacity. This solution might or might not turn out to be practical, but it is a very promising area for investigation. If successful, this move should convert Cassner's small loss in the current route business to a significant profit. In addition, the Cassner company would be able to solicit chain, voluntary chain, and retail store volume with the knowledge that any quantity of milk the customer might desire could be provided economically. With route sales facing a long-run decline, the time and opportunity would thus be available to develop substitute business as the route volume contracted and to secure profitable operation during the change-over period.

Where is Soviet Transportation Heading?

TO MOST Americans, the Soviet transportation system is an enigma—we cannot conceive of a modern industrial nation that relies upon its railroads to perform over 80 per cent of its freight haulage and upon its motor carriers for less than 5 per cent.¹ When the average American hears such statistics, he is likely to remark on the quaintness of the Russians' still using the antiquated transportation system inherited from the Tsars. A railroader, however, will probably react with a blistering tirade about the mistaken approach that American public policy takes toward transportation, inferring that we should be following the Russian example.

Neither of these points of view is realistic, however. Granting the Soviets a few quaint practices (such as brewing samovars of tea on top of the boilers in the individually heated

passenger cars), their railroads today are a far cry from the typical turn-of-the-century system. Indeed, their system may surpass ours in many respects, and we may as well recognize the fact. Moreover, there is no basis for comparison of the two systems as to the modes of transportation most heavily used. The development and the objectives of the two systems are not sufficiently similar.

TRANSPORTATION BACKGROUND

Waterways

The Soviet Union is blessed with many natural waterways—broad, deep, slowly flowing rivers and navigable lakes and seas; but there are a number of barriers to their full and effective use. Most of the lakes and seas are either in

¹ Comparable percentages for the United States in the same year (1958) were about 45 per cent for rail and 21 per cent for motor carriers. It has been estimated, however, that private carriage may amount to almost as much as the sum of regulated—and reported—haulage.

For the past two years, Mr. Lane has been studying the Soviet transportation systems as a Ford Foundation Fellow at Indiana University.

remote areas of the nation or along its borders. The rivers, by and large, flow at cross currents to the channels of trade and commerce, running generally from south to north in the eastern and northern areas and from north to south in the western region. Even the Volga, whose course lies through a populated and industrialized area, is limited in its usefulness because it empties into a landlocked sea through a delta that requires constant dredging, even for shallow-draft vessels.² Because of its latitude (the Soviet Union is comparable in latitude to Canada), many rivers are frozen for extremely long periods during the year. Those rivers flowing northward into the Arctic Ocean thaw in their upper extremities before they do downstream, and this adds substantially to the flood problems in the spring. One can well imagine the chagrin of the Soviet transportation planner as he views all the unutilized capacity of the waterways—capacity that remains unutilized because the rivers do not go where freight needs to be shipped or because the navigation season is so short.

Railroads, Highways, and Pipelines

Aside from the natural waterways, the Russian transportation system at the beginning of the Soviet era consisted largely of some 70,000 route-kilometers of railroad located, except for the lonely line of the Trans-Siberian Railway and a few lines in Soviet Central Asia, in European Russia. To be sure, there were some 1.5 million kilometers of highway; but only 2 per cent of this mileage was paved, and much of the remainder was impassable during wet seasons. A thousand kilometers of pipelines were located in the oil fields, serving primarily as gathering lines from the wells to nearby refineries, ports, or railheads.

The degree to which Russia relied upon rail

and water transportation just prior to the Revolution should not be severely criticised. Even in much more advanced nations, highway carriage at that time was in its infancy and air transportation was still a dream. The new Soviet government had the choice of continuing and expanding the water-rail system of Tsarist Russia or of developing one of the newer modes into a major carrier. It chose—by logic and necessity, I think—the former course.

TRANSPORTATION POLICY GOALS

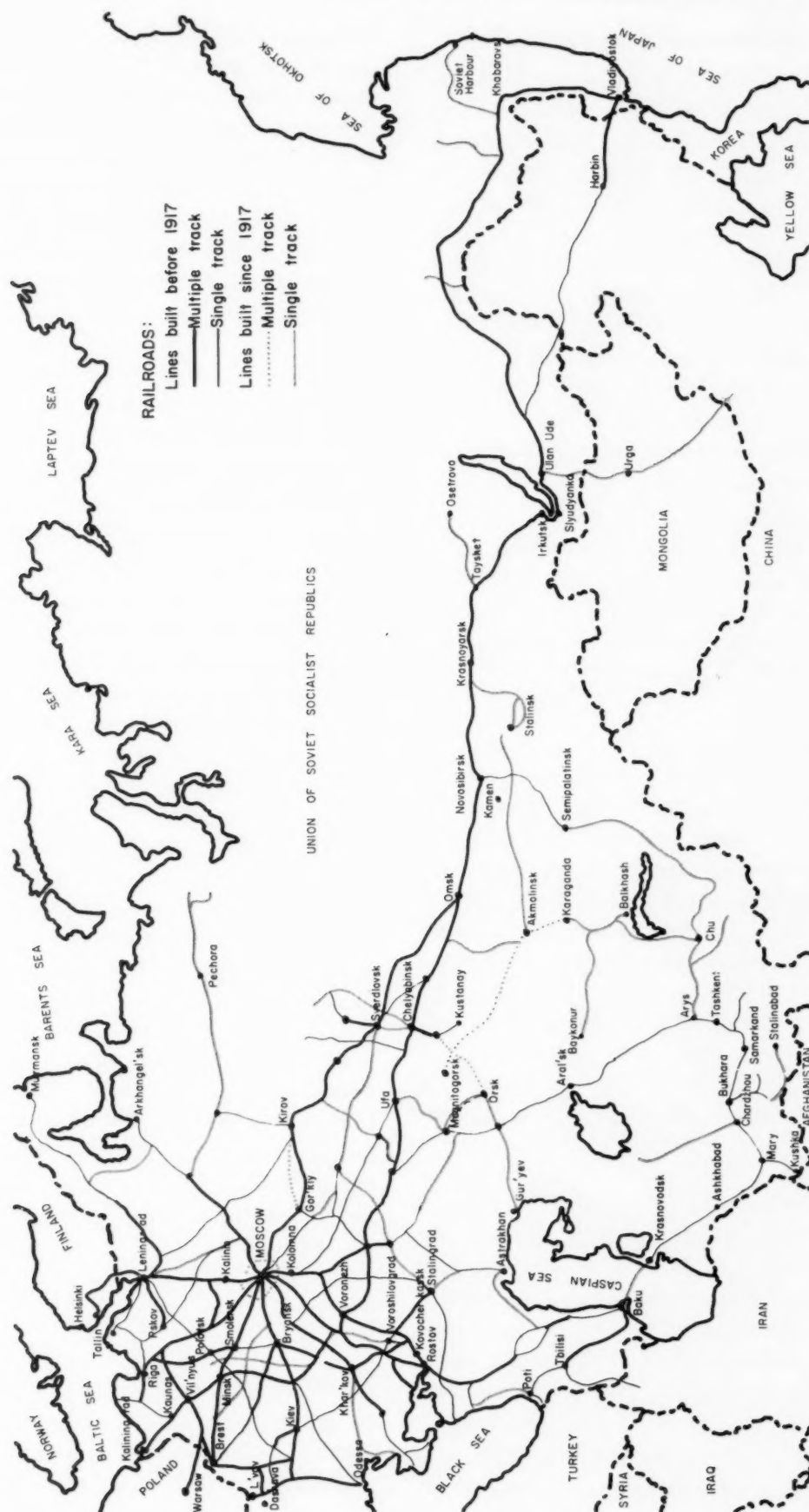
An economic activity as large and important as the transportation industry has many objectives, but a review of events in Russia since 1917 indicates that a few of these objectives were paramount. In general, the Soviet Union has attempted to get the maximum volume of output from its transportation system with the lowest possible combination of capital investment, operating costs, and man-power requirements.

The Capital Shortage

The greatest influence on Soviet transportation policy has been the relative shortage of capital in the USSR during the Soviet era. This shortage has dictated a policy of capital conservation. Party doctrine and national ambition spurred the drive toward industrialization of the Russian economy, and the simultaneous growth in many industries necessitated a policy of capital rationing. This policy meant that the transportation industry was allocated relatively little new or replacement capital for more than a decade, and it led to the severe transportation crisis of the early 1930's, which seriously affected the ability of the railroads to perform the transportation services necessary for the achievement of basic goals in many other industries. On the brighter side of the picture, however, existing railroad facilities came to be utilized more intensively than they had ever been.

² The Volga-Kama system accounts for about 70 per cent of Soviet river transportation. It is connected with the Black Sea by the Volga-Don Canal, but the volume of traffic moving via this route has been a disappointment to the Russians.

The Russian Railroad System



Operating Economy

The Soviet approach to operating economy seems curious to the Western observer. Much of the Soviet's evaluation of costs is stated in terms of physical units, such as kilograms of coal or liters of oil consumed, or grams of wear of steel rails. Some of the mystery surrounding this approach can be cleared away if it is realized that the Soviet economy is essentially an administered price system. Some prices reflect the desire of the government to penalize the user, while other prices, in effect, constitute a subsidy to the user. In such a system, the value of cost data stated in monetary terms may well be questioned.

Low operating costs alone are not sufficient to ensure the selection of a particular mode of transportation. The size of the investment necessary to achieve operational status may well be too large, especially if the expected volume of traffic is relatively low.

Labor Requirements

Since skilled labor is in relatively short supply in the Soviet Union, transportation planners must choose media that make sparing use of labor in the movement of goods and people. It may seem inconsistent to claim that a heavy dependence upon railroads helps the Russians to conserve labor, especially in view of an employee/mileage ratio of almost 50 to 1 in the USSR, as compared with a ratio of about $3\frac{1}{2}$ to 1 in the United States. But these statistics are misleading if all surrounding circumstances are not considered. In the Soviet Union, a more lavish use of labor may be necessary because of the relative shortage of capital. "Featherbedding" does not exist in the Soviet railway system, which is practically a military organization. Freight trains are operated with three-man crews—an engineer, a fireman, and a conductor. Passenger trains have somewhat larger crews; two conductresses—one or other of whom is on duty at all times—are in charge of each sleeping car.

How then do the Russian railroads use all

of the people they employ? In spite of small crews, a large number of workers is required to carry out a policy of running short trains at frequent intervals. In addition, while the Soviets have mechanized many of the larger operations (for example, they use huge machines for laying track), most of the smaller tasks in track maintenance and in the shops are performed manually, and quite often by women.

MEETING THE OBJECTIVES

Water Transportation

At first glance, it might appear that water transportation would fulfill the primary objectives of Soviet transportation policy—low investment, low operating costs, and low manpower requirements. In many instances, however, navigation facilities may require large capital outlays. Dredging, canalization, locks, dams, and other appurtenances are expensive, even in a socialist economy. The low operating costs and manpower requirements commonly associated with U.S. water operations may be increased in the Soviet Union by the wide use of individually powered units as contrasted with our floats of barges pushed by high-horsepower tugs. However, the Russians believe the greater speed, quick turnaround time, and faster lockage of the individual units compensate for the lower tonnage capacity per movement.

As indicated earlier, there is actually much unutilized capacity on Russian waterways. Not only is the direction of flow a problem, but it is economic folly to invest much in equipment and facilities that may be unusable for six months or more each year because of ice, especially if stand-by rail or highway facilities must be maintained for use during the winter.

Highway Transportation

In general, the Soviets have concluded that highway transportation does not fulfill policy objectives. By their calculation, highway car-

riage is superior to rail for distances up to 25 miles—that is, primarily for pick-up and delivery service. By and large, motor transportation involves considerably higher operating costs, the ratio of labor to output is high, and the development of a system of heavy-duty highways in an area the size of the Soviet Union would require a prodigious outlay of capital. But the benefits of the mobility of trucks are not lost upon Soviet planners. Trucks are frequently used on routes of light or irregular traffic density and in areas where roads of sufficient quality consume less capital than other means of transportation. Trucks serve an important function as feeders to the rail lines, for example, in linking villages to nearby towns on the railroad.

Air Transportation

As in the U.S., air transportation is primarily used for the movement of people. It does, however, contribute significantly to the achievement of Soviet policy. Many areas of new development and isolated communities can be reached more efficiently and at lower cost by air than by any modern surface transportation. The Soviets have also utilized air transportation to provide additional room on the rail schedules for freight trains on densely traveled routes. For example, the 55-minute flight from Moscow to Leningrad is priced at \$13.50, compared with \$19 for the 12-hour train trip.

Pipelines

The Russians have been slow to exploit the advantages of pipelines for the movement of petroleum products. Prior to World War II,

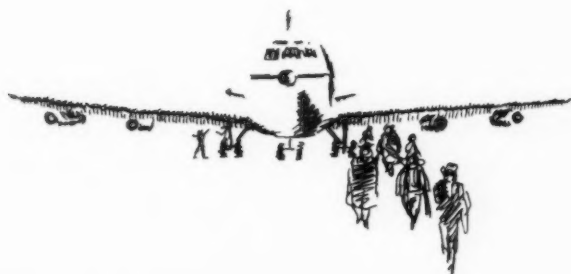
practically all pipelines were located in the oil fields; but shortly after the war, natural gas lines were extended to Moscow from fields in the Ukraine, the Caucasus, and the Trans-Volga area. The Soviets are now planning a crude oil pipeline parallel to the Trans-Siberian Railway all the way to the Pacific coast, and completion of this project to the Lake Baykal area is contemplated by 1965. Two forty-inch natural gas lines are said to be under construction from the new gas fields of Soviet Central Asia to the Urals and to the major Central Asian cities.

The great savings in man power and operating costs over other means of transportation should make the capital investment in pipelines worth while, particularly for those lines to major consumption centers. Pipeline construction will also facilitate the movement of other types of freight through the release of facilities and equipment now being used to transport petroleum products.

THE RAILROAD SYSTEM

American Influence

Whether they acknowledge it or not, the Russians' railroad system owes a great deal to American influence. The engineer who supervised the construction of the Moscow-St. Petersburg (or Leningrad) railroad from 1842 to 1849 was an American, Major George Washington Whistler, a graduate of West Point (Class of 1819), a veteran of early American railroad construction including the original portions of the Baltimore & Ohio, and the father of artist James Whistler. During the first Five-Year Plan, Soviet railroaders visited the United States to observe the latest developments in American equipment and practice. They also bought ten steam locomotives equipped with the latest available innovations, and many of these innovations soon became standard on Russian locomotives. During World War II, the USSR received hundreds of American locomotives, many of which are still in use today. In 1960, delegations of U.S.



and Soviet railroaders went on exchange visits. This gave American railroaders an opportunity to bring their concepts of the Russian railroad systems up to date.

Fulfilling Policy Objectives

In general, the railroads have fulfilled Russian transportation policy objectives very adequately. They use small crews, and the operating costs are stated to be less than by highway, except for very short distances.³ Since railroad operations may be tailored to fit the physical limitations of the plant, the railroad systems are frequently able to conserve capital. If track is poorly ballasted or if gradients and curvature are excessive, action can be taken to compensate for these limitations—for example, train speeds can be reduced, train tonnage adjusted, or helper locomotives added to the trains. American railroaders who have visited Russia have commented about the light (to us) catenary construction seen along electrified lines, but they have noted that the lower train speeds seem to make this cheaper construction feasible.

A primary objective—though it is sometimes compromised by political, social, or military objectives—of the Russian transportation planners has been to get every available ton-kilometer of output from existing facilities before constructing new routes. Their success is little short of phenomenal. By 1958, the annual amount of ton-kilometers handled by rail was 17 times that of 1913 and over three times that of 1940, though route mileage was only 70 per cent greater than in 1913 and only 14 per cent greater than in 1940. Of inestimable value in the accomplishment of this task were the basic high-capacity system taken over from the Tsars, the wide five-foot gauge, and the relative absence of grades and curves. The ability

to plan shipments in cooperation with industrial managers and to penalize shippers and receivers for failure to unload and release equipment promptly has also helped to expand rail capacity. These factors result in a high ratio of loads to empties, and in an equipment turnaround time approximately half that of U.S. railroads.

The Traffic Burden

The freight burden of an expanding industrial economy is staggering; and this burden, coupled with a capital shortage, has created problems of epic proportions for the Soviet transportation industry. Despite the disparity between railroad traffic growth and the gain in rail mileage, the railroads have handled a remarkably constant proportion of the total tonnage over recent years. Though total Soviet ton-kilometers have more than tripled in the past two decades, this rate of growth may not continue over the next twenty years. The higher the base from which the increase is figured, the more difficult it is to sustain a high rate of growth in ton-kilometers. There is one factor, however, that indicates a continued growth in ton-kilometers, and that is the increasing length of haul. In a large country such as the USSR long hauls are not unusual, and present policies of regional specialization in production seem to dictate a growing average length of haul. Growth can similarly be inferred from the industrialization of the eastern reaches of the nation, at least to the extent that the products of these industries must be marketed in the more populous western sections. Increasingly longer hauls of basic raw materials and foods—timber and grain, for example—are to be noted. All of these pressures add¹ up to an increased demand for transportation services.

Traffic Density

The Soviet railroads already have the highest average density of traffic in the world—in 1956 the average was 9 million ton-kilometers per

³ To what extent the low efficiency of motor transportation is due to the absence of a sunk investment in a completed highway system is not known, but I believe this may be the critical factor that so strongly favors railroads.

kilometer of route⁴—and if the volume of traffic planned for the railroads in 1965 (some 1,850 billion ton-kilometers) materializes, this density will increase even further. Since the railroads have traditionally been called upon to carry more than their planned share, there is little doubt that this plan will be fulfilled. The density of traffic on the Trans-Siberian Railway between Omsk and Novosibirsk was a fantastic 69 million ton-kilometers per kilometer of route in 1955, a fact even more remarkable considering the preponderance of flow from east to west.

Russian Locomotive Experiments

The Soviets are not adverse to experimenting with new devices and ideas to improve their railroad systems. One of the world's first diesel-electric locomotives was constructed in Russia in 1922-24, though it was not considered a success. The failure of German diesels tried on the dry Central Asian lines in the early 1930's was attributed to poorly trained maintenance personnel and inadequate facilities. Notable Russian experiments in steam locomotives have included the world's only attempt at a rigid frame, seven-axle locomotive; a trio of locomotives using steam at all speeds and diesel fuel in a special chamber of the cylinder at higher speeds; and an opposed piston locomotive designed to reduce the track stress normally associated with steam locomotives. Most successful of all Soviet experiments were those involving condenser locomotives, an adaptation of a German idea. These locomotives, built by the hundreds, were designed to salvage the moisture from their own exhaust. They were particularly useful in dry or frozen areas, and many are said to be still in service.⁵

⁴ V. V. Zvonkov, *Principles of Integrated Transport Development in the U.S.S.R.*, Robert N. Taaffe, ed. (Chicago: The University of Chicago, The Department of Geography [1958]), p. 10. More recently, the density is said to have increased to about 14 million ton-kilometers per kilometer of route, according to Taaffe.



Although much experimentation was done, the typical Soviet practice was to adopt one or two basic designs for mass production. Construction of steam locomotives ceased in 1957, but they will be used in Russia for many years. The basic reasons for their continued use are the relative youth of the locomotive stock and the familiar capital problem of allocating sufficient resources for replacement.

Route Improvements

The Soviets have achieved substantially greater capacity on existing rail lines by upgrading selected skeletal routes. In some instances, line relocations were in order. In other instances, rail, ballast, and bridges were strengthened and improved; new signals, longer sidings, and improved terminal facilities were added; and often a second main track was added or the route was electrified, or both. These trunklines are given the best equipment, and rush shipments are frequently run long distances without intermediate

⁵ J. N. Westwood, "The Soviet Search for Super-Power," *Trains*, XXI (January, 1961), 26-36.

switching of cars. In addition, the Soviets are presently attempting to combine the American practice of running heavier trains with the European practice of frequent schedules.

Electrification and Dieselization

Since 1957, the Soviets have pursued a policy of electrification and dieselization. The goal for 1965 is dieselization of over 50 per cent of the routes carrying 43 per cent of the total traffic, and electrification of 22 per cent of the routes carrying 44 per cent of the traffic.⁶ Included in the plans is the complete electrification of the Trans-Siberian Railway, a project already well under way. Large-scale electrification has not been considered in the United States since the Pennsylvania Railroad dropped its plans to electrify its main line from Harrisburg to Pittsburgh during the 1930's.

Widespread electrification is surprising in view of the Soviets' efforts to diversify most industries as a precaution against attack. Electric railroads are vulnerable from two points of view: the power source may be destroyed; and the catenary and supply lines may be easily broken, immobilizing locomotives until repairs can be made. However, the Soviets are apparently willing to risk these disadvantages in order to obtain the advantages inherent in electrification. They may have power sources sufficiently numerous and dispersed to preclude a complete shutdown if a few should be destroyed; and it is likely that repairs to catenary and supply lines could be completed simultaneously with repairs to damaged track.

The principal advantage gained by electrification is greater capacity. According to Russian studies, the diesel-electric locomotive permits doubling the tonnage on lines that used to be steam operated.⁷ But when steam lines are also electrified, train speeds can be increased with the increase in tonnage. With

faster speeds, more trains can be operated in a given period of time, and the capacity of the line is greater than with dieselization alone.

Freight Equipment

The freight equipment on Soviet railroads has also been modernized, and the number of continental-style, four-wheel cars is rapidly declining. New freight cars have American-style automatic couplers, air brakes, four or six axles, and higher carrying capacity, and all are reportedly equipped with roller-bearings. Freight cars are built from a few standardized designs, which is said to increase usability, reduce costs, and facilitate repairs. This is in contrast to the American trend toward specialized cars for specific types of cargo.

FUTURE SOVIET TRANSPORTATION

One of the goals of the current Seven-Year Plan is to reduce the railroads' share of total traffic from its 1958 share of 81 per cent to 72 per cent by 1965. If the results of past plans are any guide, this goal will not be achieved. In the past, the Russians have apparently found it much simpler to expand the railroad capacity than to find the capital necessary for providing alternative means of transportation. The railroads, however, have operated in an atmosphere of constant pressure.

It seems to have been difficult for the transportation ministry to convince the various production ministries to disrupt all-rail shipping routes in favor of combined rail-water routes during the navigation season, and most of the present excess capacity in transportation in the USSR is found in water carriers. Transfer costs and damages to cargo in transshipment also militate against increased use of water routes. As a result, water transportation (by inland waterways) has hovered around 6 or 7 per cent of the total ton-kilometers since 1940.

⁶ Holland Hunter, "Soviet Transportation Policies—A Current View," *Comparisons of the United States and Soviet Economies: Papers Submitted by Panelists Appearing before the Subcommittee on Economic Statistics, Joint Economic Committee, Congress of the United States, Part I*, (Washington: U. S. Gov't Printing Office, 1959), p. 197.

⁷ In the United States, railroads adopted the diesel primarily as a tool to reduce operating costs. In Russia, on the other hand, the diesel is viewed as a means of getting higher utilization from existing lines with the least possible capital investment.

Train to the Urals

CLEARING the line took three days, and all the Zhivagos . . . took part in it. They were the best three days of their journey.

The landscape had a withdrawn, secretive quality. . . . The ruins added to the air of mystery; so did the wariness of the remaining villagers, who, afraid of informers, avoided the passengers and were silent even among themselves. . . .

Zhivago's section of the track had a fine view. The country to the east dipped down into a valley and rose in gentle hills as far as the horizon.

On the top of a hill there was a house exposed to all the winds; its park must have been luxuriant in summer but could not give it any shelter now with its frosty lacework.

The snow smoothed and rounded all contours. It could not quite conceal the winding bed of a stream which in spring would rush down to the viaduct below the railway bank but at present was tucked up in the snow like a child in its cot with its head under the eiderdown.

Was anyone living in the house on the hill, Zhivago wondered, or was it standing empty and falling into ruins . . . ? . . .

The house teased his curiosity but kept its sorrowful silence. Questions were not in order in these days, and no one ever answered them. But the sun sparkled on the pure whiteness with a glare that was almost blinding. How cleanly his shovel cut into its smooth surface! . . .

When finally the last piles of snow between the cleared track were levelled, the entire line of rails came into view, flying into the distance like an arrow. On each side stretched white mountains of shoveled snow, bordered all along by the black walls of the forest.

—Boris Pasternak

DOCTOR ZHIVAGO (Pantheon)

The 1965 goal is to increase this share to 9 per cent, a goal that I doubt will be reached.

Soviet plans call for shifting most of the very short-haul traffic to motor carriers, and the railroad equipment thus released can be devoted to long-haul movements. The highway share of total ton-kilometers is to grow from 4.8 per cent in 1958 to 5.7 per cent in 1965, according to the plan. The success of this plan may depend primarily upon an increased output of trucks, since the highways around the cities should be adequate for this short-haul traffic.

Air transportation will probably continue primarily as a means of passenger transport, though the express-type service will no doubt keep increasing. The promotion of air travel as a means of relieving the pressure for more rail passenger service will probably be continued.

The new pipeline construction in the USSR

offers the best possibility for relieving the railroads of a part of their present traffic burden. The crude and products lines will release tank cars from long-distance hauls for use in local hauls from pipeline terminals, and equipment and facilities presently used for the transportation of petroleum can be used for other purposes. The new natural gas lines will serve to reduce the demands upon certain routes to haul coal, since the gas will be substituted for coal in many industries. The growth expected in pipeline transportation from 1958 to 1965 is quite substantial—from 2.1 to 7.2 per cent of total ton-kilometers transported.

Substitutes for Transportation

A nation-wide network of power transmission lines now under construction will also help to relieve railroad traffic problems. The process

of hauling coal to consumption centers for conversion to electricity will be reversed: the coal will be converted to electricity first, then transported by wire to the consumption centers. The success of this plan depends to a great extent upon the outcome of present experiments in long-distance power transmission. The Russians have also attempted to exploit low-grade ores and fuels located near consumption centers in order to relieve the burden on transportation, but they have discovered that increased production costs often exceed any savings possible through reduced transportation.

The sum of these actions should be a gradual reduction of the relative importance of the railroads, though probably not as rapid a reduction as the Soviets would like. It is my opinion that the pipelines will gain a very substantial portion of this diverted traffic, as will motor carriers. If the Soviets should decide to quicken the pace of highway construction and if they should permit the production of a substantially greater number of trucks, the planned reduction of rail utilization may be accomplished.

IN SUMMARY, the Soviet and American transportation systems may be briefly compared. In America, we have encouraged the construction of a vast amount of excess capacity in our transportation industry, whereas in the Soviet Union, the transportation system is constantly being pushed to its limit. The Soviet system, though expandable, is not nearly as capable as our own of rapid extension in an emergency—there emergency conditions are usually met by a reduction in nonessential traffic and services. By contrast, our system possesses a flexibility that makes it capable of meeting emergency demands; but it shows its greatest strain under peacetime conditions.

The fuller utilization of transportation resources in the Soviet Union may appear desirable from an economic point of view, but I question whether the political and social concepts of our society would permit our taking the action necessary to achieve a similar degree of utilization. It is too much to expect that identical transportation systems would develop in two nations with such differing social objectives and underlying economies.

How happy the life unembarrassed by the cares of business.

—*Publilius Syrus*

MAXIMS

EMPLOYMENT PROBLEMS

in a Changing Economy

ALTHOUGH the phrase "population explosion" is usually associated with the problems of underdeveloped countries where teeming masses attempt to subsist on fantastically low incomes, the more industrialized nations will not be unaffected by the population increase that has been taking place since World War II. The population problems of the developed countries will be different, of course, from those of the backward areas. In the United States, for instance, the anticipated population growth of the 1960's will create no insoluble consumption problems. We may yet have to come to terms with Malthus, but this is a matter that is some decades away. Our immediate problem is more likely to be that of generating enough economically remunerative work for all who want employment.

Obviously, a rise in the rate of population growth has a direct effect on the labor force. If more people are about to seek jobs, the economy must step up its rate of growth to absorb these new job seekers. In addition to population growth, economic, social, and

technological factors can affect the character and composition of the labor force. These factors overlap and condition one another in significant ways, and the conjuncture of existing trends in the 1960's may have an impact serious enough to warrant the phrase "labor force explosion." The character of the problem can perhaps be best indicated by examining the various factors individually.

THE POPULATION OUTLOOK

In making an estimate of future population, the demographer subtracts a probable number of future deaths from a probable number of future births. The estimate, therefore, is based upon assumptions about birth and death rates, and sometimes—as in the late 1930's—these assumptions turn out to be grossly inaccurate. In the case of labor force projections, the basic data are somewhat more reliable; at least, we are dealing with people who have already been born, people who can be located, counted, and classified according to the usual demographic categories of age, sex, occupation, place of residence, and marital status.

Anything unusual that occurs in the size

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and composition of the working-age population during the present decade must necessarily reflect something unusual in the birth rate of previous decades. As it happens, both the 1930's and 1940's were unusual with regard to population growth. During the depression of the thirties, the population of the United States increased by only 7.5 per cent, about half the growth rate during the 1920's. The later 1940's witnessed the start of a "baby boom," and population increased by 14.5 per cent. In absolute numbers this amounted to 19 million persons, the largest ten-year increase in the nation's history. The rate of growth continued to rise during the 1950's, and that decade witnessed an increase of 19 per cent or 29 million persons.

The dip in the 1930's and the upsurge after 1940 will produce a distortion in the age structure of the working-age population, a distortion that will be multiplied by the increase in the average life span and the fact that pre-1930 birth rates were much higher than those of the 1930's. Taken together, these factors will produce a sizable increase in the number of persons under 25, practically no change in the middle-aged group, and a substantial increase among persons over 45. According to present expectations, the population between the ages of 18 and 24 will increase by two-thirds during the next ten years, that between the ages of 25 and 44 will remain about the same, while that between the ages of 45 and 64 will increase by about one-fifth.

There is, of course, a difference between the population of working age and the working population since not all persons of working age will be active in the labor market. In a projection of present population and labor force trends that extends to the year 1970, the Bureau of Labor Statistics of the United States Department of Labor has presented the following estimates of changes in the number of workers: a 46 per cent increase in workers under 25; a 12 per cent increase in workers aged 25 to 34; a 1 per cent decline in workers aged 35 to 44; and a 20 per cent increase in workers 45 and over.

The implications of these data are obvious. We shall have a dramatic rise in the number of young and inexperienced workers. At the same time, the skilled, experienced middle-aged group, the source from which various types of leadership will have to be drawn, will remain constant in absolute numbers and will become a smaller proportion of the total labor force. Older workers, whom employers are disinclined to hire, will increase in number, and the problems of aging and the aged, already a matter of much concern in our society, will become even more pressing.

"PROSPERITY" UNEMPLOYMENT

An economic factor likely to cause trouble in the labor market during the present decade is the apparent inability of the economy to eliminate an uncomfortable level of unemployment even during relatively prosperous years. We shall, of course, have our cyclical swings during the sixties with unemployment becoming now more, now less serious. Such swings have always been a feature of our economy, and there is no reason to suppose that they will disappear in the near future. The new dimension in the picture, however, is the unemployment that cannot be written off as "normal" in periods that appear to be otherwise prosperous.

"Persistent" or "prosperity" unemployment, as it has been called, has attracted the attention of more and more labor force experts in recent years. According to one analyst, about five-sixths of the average peace-time unemployment since 1947 has been of the kind that prevails even during prosperity. At no time since 1954 has the annual rate of unemployment fallen below 4.2 per cent of the civilian labor force, and after each of the postwar recessions, the unemployment rate was higher than before the recession. In early 1960, almost two years after the start of the recovery from the 1957-58 recession, 5.2 per cent of the labor force was unemployed.

There is little or no consensus among economists as to what has been responsible for prosperity unemployment. The following have

been argued as causal factors: rate of productivity growth too high; rate of productivity growth too low; wage rates too high; wage rates too low; government monetary policies too restrictive; government monetary policies not restrictive enough. The purpose of this article, however, is not to untangle the arguments about the causes of the unemployment but rather to describe its implications for the labor force. With this as our aim, we can note a strong possibility that the economy will be plagued with nondepression unemployment through the sixties. The cause of full employment, around whose banners so many flocked after World War II, has become more or less passé, its popularity having been usurped by the cause of "price stability." It may be possible for our economy to reach nearly full employment levels under stable price conditions, but nothing that has happened in the last fifteen years lends much support to the possibility. Fifteen years ago, a chronic unemployment rate ranging between 4 and 6 per cent of the labor force would have been regarded as catastrophic. Today, many regard the possibility with equanimity and consider it one of the costs of a stable price level.

From the standpoint of the labor force, a chronic unemployment rate averaging around 5 per cent of the civilian labor force will mean, of course, a steady increase in the absolute amount of unemployment. A 5 per cent rate in 1960 is equal to slightly over 3.5 million persons. In 1970 it will be equal to almost 4.5 million, an amount that is both economically wasteful and socially dangerous. The unemployment, furthermore, will be concentrated in the age brackets already beset with problems. In the past several years, unemployment among younger and older workers has been well above average. The average unemployment rate for males under 24, for instance, has consistently been twice that of the average for all males. Thus, the young and the old, who in any event must face a difficult labor market situation in the sixties, will have their problems compounded should the economy prove unable to break out of its subcapacity performance.

LABOR FORCE CHANGES

The broad dimensions of the changing age structure of the working population have already been sketched. Between 1960 and 1970, the labor force will increase by approximately 13.5 million persons. Almost half the increase will consist of persons in the age group 14 to 24; a good part of the remaining growth will be accounted for by women over 35.

The increasing number of women in the labor force has been one of the most remarkable labor market developments of the century. In 1890, less than 20 per cent of all women of working age were in the labor force. Today, more than 36 per cent are at work, and all signs point to an even larger percentage in the future. A good part of this growth, especially in recent decades, is the result of women aged 45 to 64 entering or re-entering the labor force. In addition, more of the present female workers are married than has been the case at any time during the past sixty years. In 1890, 13 per cent of the female labor force was married; today, the figure is 30 per cent.

These changes in the character of the labor force will create a variety of problems, but they all boil down to two major difficulties. One stems from the sheer magnitude of potential labor force growth. New workers will shortly begin to pour into the labor market at a rate that will augment the size of the labor force by 1.25 million persons annually. A rough calculation indicates that the economy will have to generate about 25,000 new jobs each week to accommodate the inflow. The second problem stems from the changing character of economic opportunity. The new entrant into the labor force, whether a teen-ager or a middle-aged housewife, typically finds a semi-skilled job such as factory operative or office clerk. Automation, however, tends to reduce the number of semi-skilled workers required; it is highly unlikely that these occupations, the major sources of new opportunities in the past fifty years, will continue to absorb the same proportion of beginning workers in the next ten

years. The number of production workers in manufacturing, for example, decreased from 12.7 million to 12.2 million between 1948 and 1959, even though the Federal Reserve Board index of manufacturing production showed an increase of 53 per cent during the same period. The picture in the clerical occupations is less bleak; in fact, there will probably be an increase in clerical employment in the years immediately ahead. The rate of increase, however, is expected to be much below that of the period 1910-50 when employment in clerical and related work grew at a faster rate than in any other major occupational group.

OCCUPATIONAL FACTORS

The year 1953 is a significant one in the history of the American labor force. In that year, for the first time in our history, more persons were employed in services than in the goods producing industries. The statistics of industrial employment reveal what has happened to the American economy within the past half century. In 1920, it took almost 40 per cent of all nonfarm employees to manufacture the goods consumed in our economy. Today only about 32 per cent are needed. In coal mining, employment has declined as a result of improved methods of productivity and the growth of competitive sources of power. The number of persons engaged in farm work has dropped from 30 per cent of total employment in 1910 to less than 10 per cent today. Simultaneously, there has occurred a substantial rise in employment in the various service industries such as tourist, auto repair, sales, and especially government. There were fewer than 3 million government workers in 1920; today there are more than 8 million.

On the basis of present signs, it appears safe to project the industrial shifts described above into the future. The movement from the primary industry (agriculture) and the secondary industries (manufacturing, mining, and construction) to the tertiary industries (transportation and public utilities, trade, finance, service, and government) will con-

tinue. Along with these industrial movements, we can expect changes in the relative importance of various occupations. The white-collar occupations will grow more rapidly than the blue-collar ones, and within the former group the rate of growth for clerical workers will slow down somewhat while the rate for professional, technical, and sales personnel will rise. The relative proportion of proprietors, managers, and officials will rise as will the proportion of service workers. Employment in the operative and semi-skilled group will increase at a decreasing rate; there will be little or no change in the number of unskilled workers; and there will be an absolute decline in the number of farmers and farm workers.

Although long-run projections of the industrial composition of the labor force are necessarily conjectural, the data on occupational and industrial employment suggest the need for a vast vocational reorientation of workers. Most forecasts predict that by the 1970's the secondary sectors of the economy, which today account for 40 per cent, will account for 30 to 35 per cent of total nonagricultural employment while the tertiary sectors will increase from 60 per cent to provide the remaining 65 to 70 per cent. Within the secondary sector, employment in manufacturing will decline from 32 per cent to about 24 per cent of total employment. The character of the probable occupational changes can be summarized as a rise in the importance of professional, technical, managerial, sales, and service employment and a decline in the importance of farm, operative, and unskilled work.

Even if we boldly assume that the growing industries will generate new jobs rapidly enough to absorb the workers rejected by the declining industries, there will remain the problem of moving people from industries, occupations, and geographical areas with limited opportunities to those where opportunities do exist. One of the challenges of the 1960's will be that of providing for a smooth man-power transition from the declining to the expanding sectors of the economy.

WASTED MAN POWER

It is difficult to think of man power as a scarce resource when the economy is operating with less than full employment. Symptomatic, perhaps, of current attitudes is the fact that a best-selling book about the waste in our economy is concerned primarily with waste of our physical rather than our human resources. Yet, if we have been profligate in the expenditure of our physical resources, we have been immeasurably more so in our man power.

Man power is wasted when persons who want jobs are unable to find them, and we have been seriously concerned with this type of waste. Man power is also wasted, however, when persons are employed at less than their maximum capacities or fail because of inadequate training to reach their productive potential. Many of the apparent contradictions in the present American economy are explained by the failure to differentiate between the two types of waste. Thus, we have, simultaneously, a serious unemployment problem and a man-power shortage in the professions and skilled trades, too many farmers and not enough social workers, unemployed steelworkers, and "overemployed" teachers.

This second type of waste—the failure to utilize human potential—has, unfortunately, received inadequate social attention because of the prevailing notion that the employment problem is nothing more than that of providing enough jobs. We have, in short, concentrated upon the quantitative rather than the qualitative aspects of employment. If there is a dramatic rise in the number of persons making an initial entry into the labor force, it is more likely that public attention will again be focused on whether they find jobs rather than on the types of jobs they find. If there is an increase in the number of ghost communities, we are not likely to be much concerned with the quality of the jobs that are created in the efforts to revive such communities. This failure to differentiate can be very costly in the context of the cold war. The production of hula hoops provides many people with jobs, but it obviously does not strengthen our position vis à vis the Russians. While this point

might appear to be obvious, convincing unemployed workers, employers, and labor unions of its significance may be no simple matter if the labor market of the 1960's turns out to be as confused as it promises to be.

There is yet another type of waste that is associated with the operation of the labor market. This type of waste, too, is likely to increase in the years ahead. The labor market is relatively inefficient as a market. Sellers of labor are usually poorly informed about job opportunities, and job seeking is generally a process of chasing down vague leads, canvassing employment offices, and milling about in the market until satisfactory employment is found. Buyers of labor are also frequently unable to find employees who meet their specifications even though qualified persons might be in the market for a job. Occasionally, job openings are widely publicized, and buyers and sellers of labor find each other with a minimum of difficulty; more frequently, however, the buyers and sellers, blindfolded by a lack of information, grope about until they bump into each other.

It seems obvious that if the labor market is already seriously disturbed, the amount of short-run frictional unemployment, that is, time spent in finding existing jobs, will increase—possibly to serious dimensions. Historically, economists have regarded this type of joblessness as "normal unemployment," a term that implies it is an expected and not particularly serious consequence of a dynamic economy. Now, however, so many demands are being placed upon our economic system that it is questionable whether we can continue to bear the social and economic costs of this waste.

THE PRESENT PROBLEM

Five major labor force problems have been identified in this article. These are:

- 1 The change in the age structure of the working-age population
- 2 The rise in the level of chronic unemployment
- 3 The imminence of a sharp rise in the size of the labor force

4 Significant changes in the occupational and industrial character of employment opportunities

5 The ways in which man power is being wasted.

Any one of the five would amount to a serious social problem; in combination, they constitute a threat of a labor force explosion of substantial proportions during the 1960's.

Can we get through this decade without a man-power policy and program? Other than the vague commitment to encourage employment contained in the Employment Act of 1946, no program exists for dealing with deep-seated labor market problems. Traditionally, we have relied upon the pressures of supply and demand expressed in the market place to straighten out the employment havoc caused by technological change. We have assumed that the canal barge captain made obsolete by the railroads, the buggy-maker thrown out of work by the emergence of the automobile, and the farm boy forced off the land by the use of farm machinery would eventually find their ways to jobs in the growing industries. And so they have, but work time has been lost, incomes have not been earned, and skills developed over a lifetime of work have been wasted. Historically, the American economy with its abundant resources and high productivity has been able to write off such waste as one of the costs of progress. The suffering involved was borne by the individual who happened to be in the wrong occupation or geographical area.

Thus, in the past, the individual costs of labor market frictions have been high, the social costs not too consequential. The factor that may raise the social cost in the future, however, is the international situation. Can we now afford to have young men and women sitting around idle, people training for occupations that will soon disappear, economic ghost towns dotting the nation, elderly persons with skills and know-how being forced into retirement, and housewives who would prefer to work remaining in the home because of job shortages? Can we, in short, afford to have a totally unplanned labor market?

Our failure to address ourselves seriously to this problem seems to stem from the fact that the depression of the 1930's left a deep imprint on the American psyche. Since then, there has been a tendency to think of employment problems almost exclusively in terms of the type of unemployment generated by the cyclical swings in the levels of business activity. When one thinks of an employment program, the first thing that comes to mind is a series of fiscal and monetary measures to counter a possible depression. The techniques appropriate for dealing with cyclical unemployment, however, are not particularly effective for dealing with the employment problems that we may have to face in the future. The situation may be likened to that of a nation equipped with an atomic arsenal but faced with a brush-fire war. Fiscal and monetary measures are capable of causing radical changes within the economy but are relatively ineffective when the problems call for precision-type adjustments.

It is ironical, perhaps, that by the time the Keynesian analysis is generally accepted, the Keynesian remedies may be obsolete. These remedies, directed toward inducing variations in the aggregate level of economic activity, cannot be presumed to be effective instruments for dealing with the employment problems associated with changes in the structure of the economy. If there is any lesson to be derived from the experiences of the 1930's and 1940's, it is that some degree of intelligent planning can enhance the viability of a free enterprise economy and is not at all incompatible with the operation of such an economy. The thought and planning that have been devoted to cyclical unemployment must now be supplemented by an interest in the effect on the labor market of declining industries, technological displacement of workers, in the difficulties involved in moving older persons from one area to another, and in the prevention of waste, and similar problems. There have been many general suggestions; the need now is for more specific planning and program development.

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Egypt's Need for Marketing Management

EGYPT HAS become, in the past decade, an increasingly important economic and political force in world affairs. This force has been felt through such events as the 1952 revolution; the 1956 nationalization of the Suez Canal and the subsequent abortive invasion by England, France, and Israel; the 1957 Egyptianization and later nationalization decrees; the acceptance of support from the Soviet Union in 1958 for the High Dam; and the union with Syria in 1958 to form the United Arab Republic. Certainly, in regard to the continuing struggle between the East and the West, the United Arab Republic has become an immensely vital area.

The political maneuverings of the U.A.R. and its "positive neutrality" are, to a considerable extent, manifestations of the republic's ambitions for economic development. Before 1952 the Egyptian economy was literally stagnant; it is still pitifully poor by Western standards. But an ambitious economic development program has been launched that is intended to raise the low per capita income over the next few years.

The latest Five-Year Plan (1960-65) calls

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for an expenditure of 1.7 billion Egyptian pounds for economic development, of which 425 million will be invested in the industrial sector.¹ Both the East and the West are participating in this effort by providing substantial foreign exchange or its equivalent in goods and services. If successful, this program will not only benefit millions of Egyptians, but will set an example for other Middle Eastern countries such as Iran, Iraq, Jordan, and Lebanon. With reference to the U.A.R.'s effect on its neighbors, one writer says, "The Egyptian revolution will be to the Middle East what the French Revolution was to Europe."²

During the past several years more than one hundred and fifty factories have either been built or started, and the latest Five-Year Plan calls for substantial investments in new and expanded individual plants. To superimpose such a heavy industrialization program upon the present inefficient marketing sector of the economy raises some interesting questions, such as whether the marketing structure can adjust to meet the new demands and, if so,

¹ From mimeographed notes of a talk by Dr. Ibrahim Helmi Abdel Rahman, Undersecretary of State of National Planning, before the Egyptian Institute for Management, Aug. 14, 1960 (Cairo). The official exchange rate for the Egyptian pound is about the same as that of the British pound (LE=\$2.87). It sells, however, at a 20-25 per cent discount on the European market.

² John S. Badeau, "The Middle East: Conflict in Priorities," *Foreign Affairs*, XXVI (January, 1958), 240.

what changes are likely to occur. It is the purpose of this article to describe and evaluate the role of marketing management in the Egyptian sector of the U.A.R. in facilitating economic progress over the next several years. As might be expected, Egyptian marketing statistics are limited and, therefore, parts of this article rely heavily on observation and discussions with informed business executives and government leaders.

BACKGROUND

The total land area of Egypt is 100 million hectares, or roughly the equivalent of the combined states of Texas, Oklahoma, and Illinois.³ Only 2.4 per cent, however, is cultivated; the rest is desert. This results in one of the highest population density ratios in the world. Because of low rainfall, agriculture is limited almost completely to land that can be irrigated by the Nile. Ideally, the High Dam at Aswan and the proposed New Valley Project (which involves the use of underground water for irrigation) will increase by a third the amount of arable land. But during the next ten years, a population increase of 25 per cent will minimize the effectiveness of this increase.

Egypt is poor in natural resources, having some oil (but not enough to meet local needs), rock phosphate, iron, manganese, and small quantities of copper and chrome. The Five-Year Plan calls for increased output both for domestic consumption and export, but the value relative to the total economy will remain small barring some major "strike."

Egypt's economic policy before World War II was characterized by a lack of government intervention and an absence of government investment. During the 1930's, Egyptian industrial activity was stepped up through investments financed by the Misr Bank and the introduction of a high protective tariff. The

war produced a boom in Egyptian industry because large numbers of allied troops were stationed there and certain imports were reduced drastically. Following the war, many of the less efficient factories failed despite a further increase in the already high tariff rates. During this period (up to 1952), the government did little to stimulate industrial growth. Even so, the quantum index of the industrial production of consumer goods (1950=100) rose from 75 in 1946 to 105 in 1951, mainly because of the improved availability of imported raw materials and equipment.⁴

In July, 1952, the military took over Egypt. From the beginning, the new government was determined to stimulate industrial development. The 1954-55 budgets showed a substantial increase of nearly 50 million Egyptian pounds for such activity. Plans for construction of the High Dam were announced and, in 1954, a contract with a West German firm was signed for an iron and steel factory.

The French, British, and U. S. governments protested the nationalization of the Suez Canal by freezing Egypt's foreign exchange assets, thus slowing Egypt's industrialization program. The expense of mobilization in the attack on Suez was another disruptive force. In 1957, all British and French holdings were transferred to Egyptian ownership; these measures forced native management to assume control and operation of a great many companies, especially with regard to the finance and marketing activities. Since then, other companies, including those owned by

⁴ Sources for data here and in the rest of the article include:

National Planning Commission, *Index Numbers of Production and Foreign Trade of Egypt, 1945-1954* (Cairo, 1956), and National Bank of Egypt, *Economic Bulletin*, Vol. X, No. 1, 1957

Department of Statistics, Presidency of the Republic, *Statistical Yearbook for the Egyptian Region, 1958* (Cairo, 1959)

Basic Statistical Information, Egyptian Province, Central Statistical Commission (Cairo, 1960)

Manpower Survey in the Egyptian Province, 1957-1958, Central Statistical Commission (Cairo, 1959)

Hassan El Saaty, "Middle Classes in Egypt," *L'Egypte Contemporaine* (April, 1957). Using the *Manpower Survey of 1957-58*, the authors updated El Saaty's estimates.

³ The Egyptian sector of the U.A.R. compares with the Syrian sector as follows: population (1958)—Egypt, 24.8 million and Syria, 4.3 million; gross national product (1955)—Egypt, \$2.6 billion and Syria, \$503 million; and relative size (square miles)—Egypt, 386,110 and Syria, 71,300.

Egyptians, have been or are in the process of being nationalized.

The Industrial Picture

Since the 1952 revolution, much industrialization has taken place. Egypt has textile factories, petroleum refineries, cigarette factories, fertilizer plants, sugar refineries, airlines, shipping lines, railroads, pharmaceutical plants, metal fabrication companies, iron and steel works, cement companies, and major banking and financial institutions. All are manned and operated almost entirely by Egyptian personnel. But certain industries are beginning to have problems in marketing their output. By 1959, according to one observer, "Manufacturing output, primarily by pre-Revolution physical plants, was attaining record highs, and mineral production, with the exception of manganese, was above the 1952 level. This expansion in production, however, already has had marked economic repercussions, for markets are not readily available to absorb a great quantity of new goods."⁵ In late 1957, certain leading textile companies were becoming increasingly concerned about future exports and requested that market studies be made before any large-scale expansion of the industry was attempted. Marketing also became a problem in the cement and artificial silk industries.

Egypt is still, however, primarily an agricultural country. Nearly 33 per cent of the country's total national income comes from agriculture, in contrast to about 10 per cent from manufacturing. Cotton is the base of the Egyptian economy, accounting in 1958 for about 75 per cent of total exports. Since the cotton market suffers from wide price fluctuations, national income is affected drastically by any major swing. No alternative to this dependence upon one crop has yet been found and, as a consequence, Egypt has to import substantial quantities of wheat, flour, and tobacco. This is yet another reason for Egypt's urgency to industrialize.

⁵ Keith Wheelock, *Nasser's New Egypt* (New York: Frederick A. Praeger, Inc., 1960), p. 169.

The Consumer Market

The Egyptian birth rate has not changed since 1935, but the death rate has been declining. The effect of the difference between the two is shown in the present 2.5 per cent annual rate of population growth; thus, from an estimated 24.8 million in 1958, Egypt's population is expected to grow to about 35 million by 1975. The Egyptian economy will have to "run hard" to maintain present standards of living. This is but another motivating force for industrialization.

Egypt is a very "young" country—more than half of the population is 19 years of age and under. Such an age distribution indicates a higher rate of consumption in the future and points to the need for such social services as medical aid and education. It also means that the population is increasing more rapidly than the labor force.

The 1957-58 *Manpower Survey* revealed the following:

- 1 The bulk of the population (58.2 per cent) draws its livelihood from agriculture, although this percentage has been declining. In 1957, some 23 per cent of the population resided in the metropolitan areas (Cairo, Alexandria, and the Suez Canal Zone) versus 77 per cent in the market town-rural areas.
- 2 The percentage engaged in manufacturing (12.7) has not increased significantly over recent years. This reflects the inability of modern mechanized industry to absorb appreciable amounts of labor.
- 3 The percentage of the labor force engaged by the government and in personal services has had a consistent and rapid increase.
- 4 Per capita income is estimated at the equivalent of \$120 per year, but the distribution of income shows a serious inequality. For example, an agricultural worker is paid about \$60 a year, an industrial worker \$200-\$300, and a corporate director \$7,500-\$10,000.
- 5 The rate of literacy has increased substantially over the past several years and now stands at 40 per cent for males and 17 per cent for females.

Egypt has a clearly defined social class structure with an estimated 80 per cent in the lower class, 18.8 per cent in the middle class, and 1.2 per cent in the upper class. The peasants, or fellahs, constitute the bulk of the lower class. Such individuals are very poor, tradition oriented, and sedentary; as a group, they possess remarkable cultural homogeneity and uniformity in tastes and wants. But radical changes may be in the making. Village schools are multiplying. Cheap bus service to nearby towns has been inaugurated. Most fellahs now have access to a radio, and newspapers have penetrated to even remote villages. The government plans to have public television sets in every village within the next year or two.

The middle class is growing in proportion to the growth of the total population because of increased employment by the government, land reform laws, and increased industrialization. The bulk of this group consists of small landowners, but the urban middle class is a more potent force in the economic and social development of Egypt.

A recent family budget study showed that 80 to 90 per cent of the total expenditures of rural families is for food. The rest goes for tobacco, tea, coffee, kerosene, and cloth. Rural consumers usually buy staples for further processing. Lower class metropolitan families subsist on a minimum of services and exhibit extremely modest demands for manufactured products.

The consumption patterns of the middle and upper classes have been affected greatly by foreign residents who have long influenced Egypt's social and economic life. Such persons have been the inevitable agents of Westernization. Whenever possible, they satisfy their consumption needs with products from abroad. Members of the upper social class have all too often been ready to adopt many features of Western culture to the point of minimizing their own. Further, the presence of foreign minority groups (such as French, English, Greek, and Turkish) causes a marked heterogeneity of demand and highly individualized tastes.

MARKETING IN EGYPT

Attitudes of Management

The production or technical function is typically regarded as the major activity of management. Engineering is a high status occupation and is the usual training ground for top management. Marketing is frequently associated with the work of the individual trader who is held in low regard because his services are thought of as being nonproductive, indeed, parasitic. Historically, management has concerned itself almost exclusively with production and has delegated the sales function to the wholesaler. With these attitudes, Egyptians have little regard for marketing, and most marketing jobs, until very recently, were performed by foreigners.

The Egyptian government has long exercised a high tariff policy to protect local industries. In addition, the government's investment policy has limited the number of companies within a given industry. This is understandable in view of the limited market for many goods and the need to build plants that will have economies of size. Under such conditions, the market does not pressure the firm to do more than physically distribute its product. For example, the sugar company serves a sheltered domestic market and has neither competition from local producers nor excess capacity that would pressure management into any form of sales promotion. The management is primarily concerned with operating the plant continuously and avoiding any production stoppage that might entail problems with the government. Inevitably, management operates on the basis that production governs sales.

Many companies have been founded in such stable industries as textiles and food processing with a view to replacing imports under tariff protection, thus creating situations that cause the firm's management to feel that marketing is relatively unimportant. The typical company takes the demand for its product as given and does little to alter this demand. In most cases, management has come to recognize marketing problems only under

duress—for example, when heavy inventories have been accumulated or when intense foreign competition is present.

That production is considered to be the major activity of management can readily be seen by examining the organization charts of Egyptian companies. Most larger companies have a sales department headed by a sales manager who acts as a contact with wholesalers who take over many of the functions of marketing management. In some companies, the purchasing, selling, and storekeeping activities are combined in one department, usually called the "commercial department." Typically, the sales manager or the commercial manager is below the production manager; thus, the marketing function is made subservient to the production function. Rarely is the marketing man promoted to a high management position. Very few top executives in established Egyptian companies started their careers in marketing or have had any experience in this field.

Sales Forecasting

Sales forecasting is a management tool yet to be accepted by many, if not most, Egyptian companies. The rationale for not using sales forecasting is that the firm is operating in a seller's market with assurance that its capacity will be utilized fully or, if it is a government company, that it can dispose of its production on a "cost-plus" basis. Most firms operate under the assumption that the size of the market is fixed. Further, where competition is present, few companies appear to have any drive to increase their market share.

It is not surprising that only a few companies use sales forecasting as the basis for production scheduling, since the production manager has a greater say in most management decisions than does the sales manager. There are many instances of conflict between production and sales as to lot size, variety, and length of production run; the conflict is rarely resolved in favor of the sales department.

Even in deciding on investments in new facilities or the development of new products, management makes little use of sales forecast-

ing. As a consequence, many new enterprises have been set up with a production capacity far in excess of the needs of the market. In the initial stages of the business, the management group is almost wholly preoccupied with production. Marketing problems are relegated to the "postoperative phase"; typically, the starting management team does not even include a sales manager, let alone a professional marketing man.

Product Development

From one point of view, the entire process of industrialization in Egypt can be thought of as one large-scale continuous process of product development. The selection of new products, the building of the necessary plants, the installation of the required machinery and processes, and the sale of the new products are a few of the more important decisions that are involved in product development. Very few companies, regardless of size, engage in product research of any consequence; in almost no case is product research thought of as a continuous responsibility of management. Frequently, company executives suggest that the government sponsor or underwrite product research. A National Industrial Research Center was established more than ten years ago to do product development work on a collective subsidized basis. Available evidence suggests that the Center has engaged in worthwhile fundamental research but has rendered little service to business in the area of problem-oriented research that is tied closely to product development.

As might be expected, marketing has almost no say in product development. Such an activity is thought to be the exclusive responsibility of the production unit. The most obvious explanation for this state of affairs is that most enterprises are "followers" and not leaders in the field of product development. Typically, management looks abroad for new product ideas and standards. Product imitation is an easy and natural substitute for originality and, in the extreme, tends to divorce product design and development from the needs of the local market.

Product development must, of course, rely heavily on a determination of the needs and wants of the market. But in Egypt there is little feedback from the market to the manufacturer. Not infrequently the feedback that is available is distorted. Management finds it literally impossible to obtain feedback information from its channels since it rarely markets its product, relying instead on the wholesaler who only occasionally provides any news about the market. There are no marketing research organizations that provide continuous information on consumer purchases, and only a handful of firms have ever undertaken marketing research.

The government—motivated by a strong drive to industrialize rapidly and to conserve its foreign exchange holdings—protects most local firms from foreign competition through either an import embargo or extremely high duties. As a consequence, management is relieved from market pressures for product development and product improvement; for example, one sales manager argued against the production manager's desire to improve the quality of the firm's product on the grounds that the market had no alternative but to accept the present quality.

Merchant wholesalers and large retailers clamor for increased product development and improvement in the quality of available products. The local Chambers of Commerce have suggested frequently that the government permit a small amount of foreign goods to enter the country in order to provide the local producer with some quality competition.

The lack of minimum product quality and uniform quality is a barrier to firms that otherwise might attempt to export a certain portion of their output. In some cases, such as cement, cigarettes, and fine cotton fabrics, the level and uniformity of quality are no longer the major reasons why Egyptian companies cannot export. Rather, the fact that such products have attained Western specification standards has meant that they can be compared to "foreign" products that are being manufactured in adjacent companies. They must,

therefore, be priced competitively. Sometimes this is difficult to do, especially when the products in question are being produced by new low-cost plants, for example, the German-supervised cement factories in Saudi Arabia. Export sales to high-income markets have usually encountered stiff product competition whereas exports to low-income markets have met severe price competition.

Channels of Distribution

Historically, wholesalers have occupied a dominant position in the marketing of products in Egypt. Their strong financial position enabled them to control the retailer's activities through the granting of credit. In many cases, the wholesaler was able to delay or make difficult the entry of a local product into the market, especially when he served as an importing wholesaler.

High tariff protection has improved the bargaining position of the domestic producer versus the wholesaler who is forced to compete for sources of supply. In some monopolistic or oligopolistic situations, such as sugar and cement respectively, the producer became dominant. He either dictated his terms, as with sugar, or set up his own sales organization, as with cement.⁶ The typical enterprise manager, however, has been willing—indeed anxious—to delegate to the wholesaler the job of marketing his product. Some product lines that have been tailored to meet local tastes, such as cloth at popular prices, have been accepted readily and pushed actively by the wholesaler.

The wholesaler does not perform the marketing task with any great efficiency—at least compared with wholesalers in this country. Too often, he views his assignment as consisting only of physical distribution. There are a few exceptions to this general rule; for example, the wholesaler in textiles places his order ahead of the season, pays cash, and sells in small lots on credit to many retailers.

⁶ A cement sales office sells the output of the several cement producers.

Pricing

Price control in Egypt dates back to the time of World War II when many goods were in short supply. The population explosion and limited land area are conditions that have caused the government to assume a more active role in price controls. It supports local production through a policy of high tariffs, having direct control of many imported products (especially basic food products such as wheat). Typically, the government uses a full-cost pricing system or one that provides "reasonable margins." The resulting price is frequently tempered by accepting the advice of local producers, importers, and domestic traders. Pricing has thus emerged as the multi-lateral responsibility of the government, the local producer, the wholesaler, and the retailer.

The government has often forced price reductions through subsidies. Such reductions have usually been accompanied by an increase in demand, although sometimes the consumer, in anticipation of further price declines, has postponed buying. The forced reductions in price, even with the presence of subsidies, have caused many managements to be caught in a price squeeze despite increased sales.

Sales Promotion

There is ample evidence that Egyptian management distrusts sales promotion as a technique to increase domestic demand for a given product. The size of the market is assumed to be fixed and subject to change only as a result of population growth. And yet, with the spread of education and the increased availability of "pure" water, the demand for shoes, soap, and similar items has increased. In addition, ceramics, plastic products, home appliances, furniture, bicycles, and ready-made shirts are items that appear to have considerable sales potential. The adaptation of some of these items to local tastes has resulted in increased sales—for example, a low-priced refrigerator, a small stove for making Turkish

coffee, and inexpensive, ready-made, men's white shirts.

Advertising.—The typical attitude of management toward advertising is that it is a waste of resources and of little value in activating sales, even though it may be helpful in the firm's public relations work. Too frequently, advertising is tailored to fit into national political events. Management has no patience with advertising that fails to produce immediate results. Thus, most advertising tends to be of the "direct action" type.

Almost no firm believes that advertising can "pull" the product through the channels of distribution. This attitude is understandable because:

- 1 The distribution channels (especially the wholesalers) are often so strong that they might retaliate out of resentment of being "forced" to carry a given brand.
- 2 Impulse purchasing is not very great. People who have money usually send their servants to buy groceries and convenience items.
- 3 Many products are sold unpackaged.
- 4 The lack of uniform quality makes branding difficult.
- 5 There is a lack of media suitable for national advertising.

Management almost never considers audience duplication and accumulation; thus media are selected almost haphazardly. This lack of regard for the importance of media selection is not too surprising since an autonomous advertising department is a rarity. Usually the advertising function is assigned to the public relations department or to the sales department. The size of the appropriation is arbitrary, and the decision on the amount rests with an executive not in marketing. Only rarely is advertising integrated with the activities of the sales department. Advertising budgets are typically small; a budget of LE 3,000 to LE 5,000 is considered large. For example, the Eastern Tobacco Company, with sales of some LE 40 million, spends only LE 70,000 per year on advertising or .00175 per cent of sales.

Personal Selling.—This component of sales promotion is relatively unimportant to all but a few large companies that sell such products as soap, beer, sweets, and certain food specialties. Agents are frequently delegated the problem of disposing of the company's entire output. Even when the company sells through wholesalers, only a small sales force is involved since wholesalers are expected either to order by telephone or send their representatives to place the order and pick up the merchandise. Further, considerable inter-wholesaling is practiced.

Most firms do not employ an objective method of recruiting salesmen; few have even a job description. Before a person becomes a salesman, he serves as an assistant salesman and works only part time. Many serve as assistants for years before being promoted to the rank of salesman. They have little formal training. The one or two large oil companies and the few insurance firms that offer training are exceptions. Control over the sales force centers on salaries and expenses. Little if any attention is paid to establishing sales territories, setting quotas, and routing salesmen.

Selling to the ultimate consumer is limited. In recent years, a few manufacturers have set up their own branches or stores, usually to facilitate the introduction of new items. Such outlets are conceived of mainly as demonstration centers. House-to-house selling by manufacturers is almost nonexistent.

EGYPT is committed to a policy of rapid industrialization necessitated by its exploding population, limited amount of arable land, and great dependence on cotton. The latest Five-Year Plan, which calls for a substantial increase in production facilities, has been superimposed on an inefficient marketing sector of the economy. The fact that marketing in most Egyptian companies is almost nonexistent compounds an already serious situation.

Production is revered by Egyptian management; marketing is too often viewed with disdain. The firm sells to a protected market with little local competition and thus has only to distribute its output, usually through whole-

salers. The average firm is not sufficiently concerned about its markets to even attempt a sales forecast. It has no concept of demand manipulation through the use of such strategies as advertising, personal selling, price, product and product line, and channels of distribution. Demand is assumed to be fixed and, even where competition is present, most firms have an aversion to attempting to increase their market share. The philosophy of "live and let live" prevails.

Almost no firm recognizes its responsibility to be customer oriented, and consequently scarce resources are not used properly—a waste that Egypt can ill afford. The process of industrialization is actually large-scale product development that requires determining what to produce, constructing plants, and purchasing required machinery (usually from abroad, thereby using up valuable foreign exchange).

Once the goods are produced, no one, including the wholesaler and the retailer, is very much concerned with efficient marketing. Again, the wants or needs of consumers are not considered seriously. Advertising is regarded with hostility, instead of with the idea of using it as a means of educating certain segments of the market about new products.

It has typically been thought that the marketing concept is more important to a mature industrialized country than to one with a developing economy. It is the contention of the authors that just the reverse is true because most underdeveloped countries that are attempting to industrialize can ill afford to have a major breach between the needs of the consumer and the country's industrial plant.

In the absence of a competitive market to "regulate" the economy, Egypt must somehow take steps to incorporate the marketing concept into the thinking of management. Failure to do so will prove increasingly costly and will minimize Egypt's chances of sustaining its economic development program through earning needed foreign exchange by the export of its manufactured goods.

New Forms of Manufacturing Competition

FROM time to time various influences have appeared on the economic scene that, either in isolation or in conjunction, have exercised a powerful force over competitive conditions in many manufacturing industries. The thesis of this article is that, after 1945, three factors have had a decisive influence on the competitive behavior of most industries, and that an understanding of these factors is essential to the interpretation of the economic behavior of business.

These three factors are: (1) the increasing cost of production due in part to the increase in the cost of each unit of labor and the consequent efforts by employers to substitute capital for labor; (2) the technological advance in many industries achieved often as a result of the industries' own extensive research programs; and (3) the continuous growth of the economy. The combined effects of these factors have resulted in competitive behavior that often differs from competitive behavior observed at other times. The competitive behavior of groups of industries does not correspond to universal principles; such behavior is shaped by the particular conditions that in the passage of time influence any individual industry, as well as by conditions that are common at any given time to all industries.

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No two industries show the same type of competitive behavior, and even within each industry competitive conditions change.

The influence of these three critical factors on competitive behavior has caused a change in the attitudes of business concerns toward labor relations and toward the role of government in business affairs. Changes have occurred, also, in the attitudes of business concerns toward the quality of their products, as well as toward the composition of their product line; these changes have created "the marketing concept." Most important, the competitive behavior resulting from the coalescence of these factors has introduced a vastly different attitude among business concerns toward change and progress.

It will be shown that the expensiveness of labor, the research carried on by business enterprises, and the growth of the economy have created demands for huge capital expenditures. At the same time, heavy overhead expenditures have compelled business enterprises to obtain a sales volume large enough to bring down the unit cost of production. Caught between the need to produce adequate earnings for future investments and to achieve a sales volume sufficiently large to permit optimum cost conditions, business enterprises have responded with a type of competition that might be called "profit-conscious" competition. This competition

avoids both the self-imposed, industry-wide limitations of "soft" competition and the pitfalls of ruthless competition, known colloquially as "dog-eat-dog" competition.

Profit-conscious competition and planning for profit-conscious competition might sound frivolous to those who think that profit maximization is the only standard for management action. However, the types of conditions leading to the competitive behavior suggested in this article do not serve as guides for a specific management decision on whether a course of action will increase profits. It is impossible to assert that maximization of profits has any meaning in day-to-day operating management decisions.

Following World War II, the condition of production once thought to be typical of a few industries with large overhead expenditures—sharply declining unit production costs for additional units produced over a significant range of output—became prevalent in many industries. The response of most industries was dynamic competitive behavior that sought to obtain advantages through increases in productivity, through research and development, and through a better understanding of the needs of the customers. This trend resulted in widespread benefits to the economy.

THE THREE FACTORS

Increased Labor Cost

Hourly wages in manufacturing in the United States have been rising steadily since 1945; on the surface, it appears that collective bargaining has been highly effective. To counter the wage demands of powerful unions, employers have had to resort to delaying actions, which, typically, have not proved very effective. In pressing their wage demands, labor unions have often been helped by the relative shortage of labor during this period.

It could be argued that technological innovations during this period and the resulting increases in productivity brought about the increases in wage rates. However, the reverse is also true; the continuously increasing price of labor has forced employers to accelerate

their adoption of more mechanized and automated processes of production. In many industries the process of collective bargaining speeded up the use of machinery. Whether an increased mechanization in the production process was caused by technological innovations or the pressure of the higher wages won by powerful unions, the result is the same: the employment of a higher rate of capital investment per worker employed. In other words, the expensiveness of labor contributed to an increasing use of capital in the production process. This substitution of a less expensive factor of production for an expensive factor was clearly predicted by the conventional economic theories.

As a result of the substitution of capital for labor, an important change took place in the relative importance of direct (variable) costs of production and indirect (fixed or overhead) costs. As less labor was used per unit of production, the share of direct costs, such as the cost of hourly labor directly employed to produce a unit, became smaller; and the share of indirect costs, such as the use of capital equipment to produce a given maximum production of units, showed a marked increase. This situation placed added pressure on the company to reduce its indirect costs (per unit of production) by producing and selling a higher volume. While increased sales volume is highly desirable, this objective becomes increasingly difficult to attain, since all the competing businesses in the industry have the same objective.

The unit cost of production is of paramount concern to any business enterprise. If the cost tag of the company's products can be determined only on the basis of the company's past volume of business, the company is faced with a major problem. Conventional economic theories predicted the substitution resulting from the increased cost of labor; however, these theories do not provide for the competitive effects of the subsequent changes in the relationship between direct and indirect costs.

As a consequence of the increased use of capital and the relative decline of direct costs of production, the competitive conditions

thought to be characteristic of "exceptional" industries, like the basic steel industry and the railroads, have gradually extended to all manufacturing industries. Traditional economic theory explained the behavior of some industries by stressing their heavy overhead costs and the fact that production in the significant range of the output might be increased at very slight additional cost. Economists found that the exceptional industries required regulation by governmental or quasi-governmental authorities (for instance, the all-powerful industry-wide institutes formerly found in the steel and cement industries) to assure survival. This requirement, however, does not apply to a wide range of industries in the post-World War II period. For reasons to be explained, companies had to survive in a competitive climate without relying in any degree on collusion.¹

Manufacturing Research

The research expenditures of American industry have increased tremendously in the period following World War II. In a wide range of industries, the research function has become a major company responsibility in terms of dollars spent, physical facilities, and man power.

The pressure of sharply rising costs has taught management the value of making savings in cost by increasing productivity. Experience with efforts related to increasing productivity shows ways of cutting costs by means other than mechanization of hand processes. Research efforts yield ample rewards in the forms of changing materials, different processes, and improved designs. Management has soon learned that research expenditures can bring in handsome returns.

Research is used not only to lower costs but

also to strengthen the company's competitive position. The company, directly interested by this time in increasing its sales volume in order to spread its overhead costs, has found that research can assist powerfully in this effort. Improved products can help the company maintain and increase its share of the industry's sales. New products can bring in sales from new areas. Moreover, other industrial companies looking for new materials to assist them in their own cost problems are receptive toward new products that promise to perform better than existing products.

Thus, for the individual manufacturing company research offers assistance in many areas: reduction of costs, improvement of products, better public acceptance of products, increase in the over-all demand for the products, creation of new products, and ability to enter other industries by developing the necessary techniques. At the same time, research adds to the problem that originally induced the company to become interested in it. Expenditures in this area add to the company's overhead expense as surely as the company's major investments in mechanized production processes do.

The Growing Economy

The economy has been expanding in the period following World War II. Though this growth has been uneven, a constant stream of new products has competed with older products, and, on the whole, the economy's over-all consumption of a broad range of products and services has increased. This economic climate has been helpful to business concerns intent on increasing their sales, but, like research, it has also contributed to the problem of overhead expenses. Increased sales have meant additions to plant and equipment expenses, which have added to the existing overhead burden. The population increase of the 1940's and 1950's was much faster than the most optimistic estimates; the young generation tended to marry early and to have families. All this will mean a vastly increased labor force and vastly increased potential consumer markets in the period ahead. In the middle

¹The successful prosecution in the electrical equipment industry, ending in heavy fines and jail sentences for a number of major electrical equipment firms as well as for their executives, by the Antitrust Division of the U.S. Department of Justice has jolted many businessmen. This antitrust suit, which ended in January, 1961, made the American public realize that agreements regarding price-fixing and avoidance of price competition still exist in important American industries.

1950's, many economists predicted huge increases in the economy in the 1960's; this prediction created pressures on management even before the 1960's started. All executives who wanted to be considered progressive and forward looking talked about the opportunities of the 1960's and management's responsibility to prepare itself to meet the growing markets of this period.

EFFECTS ON BUSINESS

Demand for Capital

The three factors singled out for examination have had multiple effects upon competitive behavior; one of these effects is a sustained demand for capital funds.

The need to modernize the production process in order to save on labor cost, that is, the need to substitute capital for labor, caused a drain on capital funds in the years following the end of World War II; this drain has not ceased. The opportunities for plant modernization are continuous; today's up-to-date plant becomes the obsolete plant of tomorrow. Product obsolescence, accelerated by the eagerness to find new materials and processes, causes entire plants to become obsolete. The desire for improved consumer acceptance through product and design changes also contributes to this process.

Research, too, requires capital; often, expensive plant and equipment are needed for effective work. Furthermore, typical research expenditures pay for themselves only after many years of investment.

Funds are available from retained earnings; however, all corporate earnings are subject to a heavy federal corporate income tax (which, since 1954, apparently has stabilized at 52 per cent of earnings). Also, each company must support a liberal dividend policy in order to make its stock attractive to the investors, and for this reason, typically only about 20 cents from each dollar of earnings (before the income tax) are available for reinvestment in the company. Thus, corporate earnings must be very attractive to provide sufficient funds for reinvestments; their attractiveness will determine the availability of other funds.

Types of Competitive Behavior

The opportunities of the growing economy, the new fields opened up by technical research carried out under company sponsorship, and the need for a high level of sales due to overhead costs all add up to exceptional pressures that cause the company to compete aggressively with other companies for business.

It is impractical to define competition in the elegant, idealistic terms of classical economics—a market ready to absorb the supply offered at the going price with instantaneous adjustments in the demand for and in the supply of products by way of price. Competition in manufacturing goods never existed on such a plane. It might be more suitable to seek a standard of behavior of the type offered by John Maurice Clark:

"Competition is rivalry in selling goods, in which each selling unit normally seeks maximum net revenue, under conditions such that the price or prices each seller can charge are effectively limited by the free option of the buyer to buy from a rival seller or sellers of what we think of as 'the same' product, necessitating an effort by each seller to equal or exceed the attractiveness of the others' offerings to a sufficient number of buyers to accomplish the end in view."²

Soft Competition.—Clearly implied in any discussion of a workable competition is the type of competitive behavior termed soft competition,³ gentlemen's agreements, and so forth. There is nothing new about strong competitive pressures providing strong incentives to manufacturing industries to go out and get more business. But, at the same time, the de-

²J. M. Clark, "Toward a Concept of Workable Competition," *The American Economic Review*, XXX (June, 1940), 243; reprinted in *The American Association, Readings in the Social Control of Industry* (Philadelphia: The Blakiston Company, 1942), p. 455.

³Soft competition does not necessarily imply collusive behavior or even behavior that consciously parallels that of competitors. As used here, the term means the existence of self-imposed limitations on any aspects of competitive behavior. If used in this restricted sense, soft competition unquestionably exists, or recently has existed, in a number of American industries. One such industry is the basic steel industry.

sire to get more business has always created fear of ruinous competition that in the end will benefit nobody. In a number of industries such fears have induced enterprises to favor soft competition, a type of competitive behavior characterized by the observance of self-imposed restraints.

Where management observed the given rules of competitive behavior, they felt that the advantages of soft competition outweighed the alternative presented in hard competition. Because of the nature of managerial decisions, such a decision was not frequently reviewed and, once established, it was likely to prevail for a relatively long period, particularly in industries most adaptable to soft competition. However, the absence of continuous review did not necessarily make observance of soft competition an immutable doctrine. It was within management control, and it could be set aside if it was evident that the company's self-interest demanded it. Moreover, such a decision need not be a predetermined one; a chain of management action might lead management from soft competition into harder and harder competition.

Harder Competition.—The changing ratio between direct and indirect cost of production is an extremely powerful factor in increasing the pressure on management to get more business. If direct costs form a relatively small portion of the unit selling price, the additional sales are required either to ensure the company's survival or to increase the company's profits from good to excellent. In either event, the pressure to get additional profits through increased sales exists. The rules of soft competition do permit limited competitive activities within a certain range of tolerance. However, under the stated pressure, management (at some point) will find it necessary to stretch these rules or to discard them.

There is another aspect of soft competition that makes this type of competitive behavior difficult to adhere to. While the rules vary from one industry to another, most rules (that is, forms of restriction on competitive behavior) presuppose the production of standardized products. Once technological pro-

gress—often because of competitive pressures placed upon individual companies—brings about changes in the standardized product line of the industry, some of the rules of soft competition fall by the wayside. The increased pressures do not promote creation of new rules to fit the changed product, and the self-imposed restraints on competition must be relaxed or even abandoned.

The period following the end of World War II has seen quite marked changes in consumer tastes and behavior, in the products demanded by consumers and supplied by manufacturers, and in marketing channels. To the manufacturers, all of these changes meant opportunities that they were anxious to take. The previously established rules of soft competition no longer applied to the different marketing conditions, and the incentives to establish new rules were often outweighed by an impatience of any limitations.

Absence of Ruthless Competition.—In certain industries, the inevitable consequences of increased wage rates are increased direct costs and higher prices to customers. Many industries supplying contractor services, such as painting and decorating, fall into this category. (It must be noted, however, that the high cost of painting results in the extensive use of wall surfaces, both exterior and interior, that do not require maintenance.) In other industries, higher wage rates lead to the employment of a higher rate of capital investment per worker. This leads, as noted previously, to relatively larger overhead costs and smaller direct costs per unit of production. In turn, this promotes a desire to obtain a large share of the market regardless of the consequences. A possible result is ruthless competition, that is, competition carried on irrespective of the self-interests of the parties just to attain certain immediate objectives.

While such extreme competitive activity might have existed in a few limited areas, the economy has been largely free from this type of competition. There are good reasons why the competitors usually abstained from competitive activity of this kind.

First, strong support for not adopting ruin-

ous competitive measures was to be found in the attitude of management personnel.⁴ Second, a great deal of competitive activity, based upon competition with highly differentiated products, discouraged ruthless competition. These products were purchased on the basis of a need created through advertising or on the basis of their ability to outperform existing products. Marketing has taught businessmen a great many things about pricing, including the valuable lesson that the selling price is only one factor in moving products. Finally, the most important reason discouraging extreme types of competition is the fact that the conditions that lead to harder competition demand increased sales volume—and increased profit.

Profit-Conscious Competition. — Competition is always a critical problem in heavy overhead industries. The ratio of overhead to direct costs has been further changed by efforts to minimize the direct costs, and by expenditures for technical research and marketing. All these efforts had as their objective the reduction of the unit cost of production. In this effort, they might have been successful had they not invariably increased indirect costs. In most industries, ruthless competition was avoided. Businessmen find this type of competition abhorrent, and many of the competitive efforts of individual manufacturers discourage this type of competition. Technical research usually produces an umbrella of protection for the producer by providing him with a unique product. Marketing efforts try to do the same thing by providing the consumer with a "package" that includes availability, product feature, consumer benefits, promotional appeals, and price. (Note that

price is only one feature of the package.) Somewhat surprisingly, but quite logically, reduction of price has an irresistible appeal to a manufacturer in industries with declining production costs in the significant range of the output; a cut in price means a cut in unit cost by way of an increased output and, significantly, a corresponding increase in the competitors' unit cost. Under certain conditions, there is a strong pressure on firms to cut prices. At the same time, the pressures for avoiding such action are also strong. Reduction in price always brings with it the fear of aggressive counteraction by competitors. The individual elements of costs, in the period following World War II, rose steadily causing a continuous upward revision of the company's cost figures. Where the overhead costs of the enterprises are already large, the emphasis on reduction of unit cost, on the "shelter-producing" technical research, and on marketing efforts tends to increase such overhead costs.

Thus, the corporate enterprise is caught between soft competition, which does not permit it to compete aggressively for more business, and hard competition, which promises continuous downward pressures on selling prices. Hard competition brings about disappearing margins between direct costs and selling prices, which makes the expenditures required for cost cutting, technical research, and marketing efforts increasingly difficult to obtain. Corporations need a profit policy that will: (1) sell products at a price that permits adequate sales volume necessary to bring the unit cost down to an acceptable level and (2) produce the profits needed to support large overhead, increased technical research, and marketing efforts, as well as allow for the level of net profits that encourages investors.

PROFIT-CONSCIOUS POLICY

The profit policy desirable in profit-conscious competition will not just happen, it must be planned. One technique is for the company to adjust its manufacturing activities with a specific kind of customer in mind. This, of course, is the marketing concept, which is an extremely important tool in profit-conscious

⁴"The practices of accountants are so permeated with cost allocation directed at average costs that there is, in any large corporation, a full-time job for an economist in undoing the work of the accountant. Resistance to thinking in incremental terms runs deeper than the practices of accountants. It depends fundamentally, I believe, on the fact that the whole business cannot make a profit unless average costs are met."

Sidney S. Alexander, "Economics and Business Planning" in *Economics and the Policy Maker* (Washington: The Brookings Institution, 1959), pp. 21-22.

competition. Such competition also provides the entire company with a powerful incentive to tighten operations and improve them in all respects. The sales organization cannot afford to carry a weak sales territory with the excuse that the sales manager will retire anyhow in six years, nor can the manufacturing department live indefinitely with high "reject" sales.

No company can create tremendous profits by eliminating obvious waste. However, the demands of profit-conscious competition do not tolerate the continuation of conditions known to be detrimental to profits. Costs can be cut in ways that do not affect sales. Manufacturers of standardized products (such as steel, cement, and lumber) find that they can compete aggressively for customers' business through service, availability, quality control, extra sizes, delivery, full product line, and a host of other features. These companies often make extensive use of institutional advertising to create a favorable public image of their company. Manufacturers of consumer products know that they have to learn the desires of customers and produce products that meet these wants. As long as direct costs represent a major portion of the price, reduction in direct costs brings about an eventual reduction in price. When direct costs have a smaller role in total costs, the connection between direct costs and prices is much less certain; since direct costs are relatively small compared to the price, indirect costs become more important. The indirect costs per unit of production can be determined only in retrospect.

Once direct costs and prices become less closely intertwined, reductions in direct costs can be achieved without resulting cuts in price. Under such conditions, any cost cuts—as long as sales do not decrease—are highly desirable because such cuts in costs increase profits. The product can be altered to bring about reduction of cost; traditional materials or processes may be changed or eliminated; standards of workmanship can be lowered. While the competitive process prevents most changes that would significantly downgrade quality, the product is constantly changed for purposes of cost reduction.

Management's policy toward labor relations is affected by profit-conscious competition. Management fights increases in wage costs at every step; any wage increase means an immediate cost increase that must be absorbed. Eventual price increases caused by wage increases might also bring about undesirable cost increases by means of a rise in the indirect costs of production due to lower output.

Since competitive pressures make upward price adjustments impractical, increases in wage costs, like increases in material costs, must be absorbed quite frequently in many industries. Each company is afraid to lose sales to competition because of a price increase, and each company is under heavy pressure to increase sales to lower its indirect cost of production per unit produced. Because of the smaller share of direct, that is, variable, costs in the finished sales price, an eventual price increase is no longer a certainty in many industries. Changes in labor costs have different effects on members of the same industry. Each company differs from the rest of the industry in two important areas—in the relative importance of direct labor costs in the total costs, and in its marketing policy, which is inevitably different from the marketing policies of other companies. All these conditions make a price increase following a wage increase much more difficult and less predictable than would otherwise be the case. These conditions help to explain the stiffening of management attitudes in labor negotiations noted particularly during the second Eisenhower administration. Businessmen have changed their attitude toward government intervention. When a downswing in business activity occurs, businessmen now demand prompt remedial action. Their impatience with all obstacles toward more sales was evident in the mild but widespread business downturn of 1957-58.

The Creation of New Markets

Many businessmen think of industry's total sales as a fixed, finite figure. They are extremely concerned about maintaining their share in the industry's sales; however, there

are inevitable victors and losers in the fight for an increased participation.

Quite naturally, the interest in profit-conscious competition brought with it efforts to expand industry's sales. Advertising can be used to assure sales for the advertiser, and, also, to increase the demand for the industry's products. Often advertising promotes the sales of the products of one industry against the sales of the products of a different industry. An example of this is the extensive institutional advertising of asphalt pavements as opposed to concrete pavements.

Product developments are important in creating new markets for existing products. For instance, the use of aerosol cans has increased the use of many products. Manufacturers are under continual pressure to develop new products that do a certain job much better, that is, more economically, more functionally, or more decoratively than older products. Certain products might be developed to handle the processing of material in the factory. Other products might eliminate the need for applicators if the product were finished in such a manner that the consumer could install it. A highly successful instance of such a product is the loose-lay floor covering that has a plastic surface. This can be put in place without the assistance of professional applicators and has the appearance of professionally installed, wall-to-wall floor covering.

Both the results of technological research and the spread of higher incomes to a large proportion of the population promise to bring with them new markets. It may be that the desire of manufacturing companies for higher sales volume will be best attained with new products that have a good chance of customer acceptance.

ON FIRST appearance, profit-conscious competition allows relatively little room for aggressive competition. The company must obtain a large and increasing volume, but, at the same time, it must preserve its profit margins. Price competition, it is true, must be used with extreme care. However, companies are very conscious of price as a competitive weapon and will not hesitate to use pricing as a com-

petitive tool, if pricing promises an attractive sales volume and a favorable profit margin.

Pricing is not the principal means of attracting business. The product must be right, the advertising must be effective, the marketing channels must be appropriate and correctly motivated, the sales coverage must be reasonably uniform throughout the company's marketing area, and the additional features of marketing (merchandising, servicing, availability, sampling, and so forth) must support the sales efforts. In view of the importance of all these factors, it is clear that pricing must be "right" rather than "sharply competitive."

The existence of a large manufacturing unit margin between the direct costs of production and the sales price opens up new areas for effective management action. Virtually all elements of production, product design, and marketing are under constant review for improvements that would add to the company's profits. Products are redesigned. Materials are replaced for more economical production. The customers' wants are determined for increased sales. The marketing organization is tightened. "Make or buy" decisions on extensively used materials are constantly reviewed.

The continuous large capital outlays require a far more searching examination of the future than previously practiced; the company's sales, product lines, marketing techniques, and capital requirements must be projected for many years. In many instances, this requires a formalized planning function.

Without risking an unwarranted generalization, it might be suggested that profit-conscious competition is competition in a true sense of the word; it pledges extensive consumer benefits often including lower prices. Even though the spread between direct costs and sales price is becoming greater, this spread does not mean higher prices. In fact, management must obtain the increasing sales volume necessary to carry the company's overhead expenses through lower unit costs and better products. In other words, the institutional conditions that brought profit-conscious competition have produced workable competition, which, on the whole, benefits the economy.

WANTED

Innovations in Pricing of Services

RECENTLY, specialists in the study of the administrative process have observed a development in organizational planning that is somewhat akin to Gresham's law. Short-term exigencies, it appears, are tending to drive out long-term considerations. This also seems to be the case in the realm of economic policy. The temptation is to meet the immediate crisis and to let the future take care of itself. By all means, let us deal speedily with the problems of unemployment and recovery. But let us not forget the long-run problems of stunted growth and rising prices.

POSTWAR CONSUMPTION

One of these long-run factors that has not received the serious consideration it deserves is the marked shift in the pattern of consumption in favor of increased spending on services

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and away from spending on goods. This shift has clearly contributed to the problem of inflation and to the slow rate of demand growth in the goods-producing sector of the economy. Many also feel that this sluggish demand in the goods sector has in turn been an important cause of our slow over-all rate of economic growth since the Korean conflict.

In many ways, this shift in consumption from goods to services has been one of the most important shifts in the postwar economy. From 1947 to 1959, consumer purchases of services increased 138.9 per cent while consumer purchases in general rose only 89.7 per cent. Taken as a percentage of the consumer's budget, services rose from about 31.0 to 39.0 per cent during this same period. Furthermore, the trends in real output show that services rose by a much greater percentage than did gross national product. From 1947 to 1959, real GNP increased only by 51.6 per cent, while services rose by 63.1 per cent. Also, the service industries have been absorbing a greater share of the total labor force. Finally, what is per-

haps even more important, the relatively rapid increase in the price of services must be regarded as one of the principal causes of the nagging postwar inflation. In fact, the rate of increase in the price of services has been among the highest of the major components of the Consumer Price Index. Service prices have moved inexorably upward every year since 1945—during recessions as well as booms. From 1947 to 1959, the GNP price index for all services rose 46.4 per cent as compared to 35.7 per cent for the GNP as a whole. And over the entire postwar period, the price index of all services rose over 50.0 per cent, while the entire CPI went up only 29.0 per cent.

How are we to account for this increase in consumer spending on services, and for the more rapid rise of service prices than of prices in other sectors? Clearly, the wide variety of activities grouped under the heading "services" in the GNP and CPI precludes any single or simple explanation. Certain factors, however, do appear to have an important bearing on these increases. The shift to services can be explained to some extent by the change in the age structure of the population during the postwar period. The extreme age groups—those under 14 and over 64—now account for a larger part of the population than previously while the young adults account for a shrinking portion. These demographic shifts are especially significant since surveys of consumer buying habits show that people between the ages of 20 and 30 buy substantially more appliances, furniture, automobiles, and housing than the average of all ages, while persons 65 and over and under 14 typically spend less than the average on these goods.

Others would attribute the relative increase in the amount allocated to services in the consumer budget to the squeeze between a slowly rising disposable income and a much faster rise in the level of expenditures required to maintain basic patterns of consumption.¹

¹ See U.S. Congress, Joint Economic Committee, *Staff Report on Employment, Growth, and Price Levels* (Joint Committee Print), 86th Cong.; 1st sess. (Washington: U.S. Gov't Printing Office, 1959), p. 82.

TABLE 1

Inflation in Prices of "Overhead Services"

Item	Percentage of Total Service Expenditures	1953-59* Percentage Increase
Overhead services	19.4	20.5
Rent	5.6	12.8
Gas and electricity	1.9	14.1
Water	0.3	39.8
Property insurance	0.2	9.9
Laundry	0.8	18.2
Cleaning	1.2	13.8
Transportation service	3.7	32.3
Medical care	4.2	27.5
All other items	80.6	6.7

*1959 based on average for third quarter.

SOURCE: U.S. Congress, Joint Economic Committee, *STAFF REPORT ON EMPLOYMENT, GROWTH, AND PRICE LEVELS* (Joint Committee Print), 86th Cong.; 1st sess. (Washington: U.S. Gov't Printing Office, 1959), p. 82.

Moreover, they argue, when the growth of family income slows down, many consumers postpone purchases that they might have made if their income had grown faster. Since much of the consumer's budget for nondurable goods and services is difficult to curtail or postpone, durable goods feel the main impact of this decision.

A slowing down in the growth of family income is not, however, the crucial factor. Rent, utilities, cleaning and laundry, automobile repairs and operating costs, household and automobile insurance, and medical and hospital care are family expenses that are probably more closely related to the size and age composition of the family than to short-run changes in income. Outlays for many services have become virtually a fixed cost to the family. Thus, a relatively rapid increase in the prices of these items means that the consumer must use more of his budget dollars to cover these essential expenses and will consequently have less for discretionary spending. From 1953 to the third quarter of 1959, the price increases in the so-called "overhead services" shown in Table 1 accounted for 42.8 per cent

TABLE 2

Average Annual Rates of Growth in Productivity in Selected Sectors: 1947-57

Period	Agri- culture	Total Non- agricultural	Manu- facturing	Service*	Trade
1947-53	6.5	2.8	3.3	1.8	2.4
1953-57	6.0	2.0	1.9	1.5	1.4
1947-57	6.2	2.5	2.7	1.7	2.0

*1947-58 for Service.

SOURCE: U.S. Congress, Joint Economic Committee, STAFF REPORT ON EMPLOYMENT, GROWTH, AND PRICE LEVELS (*Joint Committee Print*), 86th Cong., 1st sess. (Washington: U. S. Gov't Printing Office, 1959), pp. 90, 93.

of the total rise in the CPI. The prices of these items increased on the average 20.5 per cent while the prices of all the other items increased only 6.7 per cent. Clearly, this means that there has been a substantially smaller part of the consumer's budget left over for other items such as goods. This fact has no doubt contributed to the sluggish growth of demand in the goods sectors.

There is yet another aspect of this shift from goods to services that, while not nearly so dramatic as the relatively rapid increase in service prices, may nevertheless in the long run be much more important. This is the increase in the portion of the total labor force absorbed by the service sector. The effects of this movement are still to a great extent theoretical; this shift of labor, however, could result in both a reduction in the amount of labor actually used for production purposes and a consequent slowing down of the rate of growth of aggregate productivity (GNP per man-hour used in production). With the exception of transportation, communication, and public utilities, the productivity of the service sector tends to be relatively low and to have a slow rate of growth (see Table 2). Therefore, it would appear that a shift to the service sector with its below average productivity rates could have serious implications for economic growth. Furthermore, with the same exceptions noted above, the service area is also a low-wage sector, a factor that could result in a further decline in the growth of aggregate demand. Both of these possibilities are of major importance and, along with the price increase, deserve further attention.

As a matter of fact, during the last few years, we have been spending a lot of time and energy examining the problems and possibilities of reconciling our national goals of providing high levels of employment and adequate rates of growth with maintaining reasonable stability in the price level. As a result of this study, we have become increasingly concerned over the cost-push type of inflation—as any good executive from U.S. Steel or any of the other “administered price” industries will tell you. Yet the figures in Tables 1 and 2 indicate that the big, concentrated sectors of the economy may not be completely responsible for our failure to achieve high employment and growth rates with reasonably stable prices. Rather, they suggest that we should also pay some attention to the cost of having shirts laundered or to the family doctor's bills.

THE ROLE OF COMPETITION

A lengthy study would be needed to deal comprehensively with the factors influencing the prices of the numerous services consumed in our present-day economy. If, however, we use the role of competition in the pricing of services as a focus for our discussion, our task becomes more manageable.

Any college sophomore worth his salt should be able to explain the key role that competition is supposed to play in what we call a free enterprise economy. Competition protects consumers from unreasonable prices, and leads to the most efficient use of land, labor,

and capital resources. In traditional economic theory, competition provides the major check against price inflation. It was not private property that made acting in one's self-interest legitimate and even desirable in Adam Smith's classic model of capitalism. Rather, it was the invisible hand of competition—the neutralizing interaction of opposing interests—that transmuted selfish motives into a public good. Without competition, self-interest becomes a flimsy base on which to build a rationale for the exercise of private power—economic or otherwise.

For all of these reasons, the maintenance of competition has in the past been a basic governmental policy. The philosophy of the anti-trust laws is that neither sellers nor buyers should be permitted to exercise substantial control over markets or prices. Where competition is inactive, government action is required—either in the form of antitrust or in the form of continual regulation (as in the case of the utilities).

Traditional theory assumes that certain market conditions must prevail if competition is to carry out its role as the prime regulator of any given part of the economy. These conditions, simplified and modified somewhat for purposes of exposition, are:

- 1 In every market, competitors must offer substitutes for the products or services offered by any given seller.

- 2 Consumers must have adequate knowledge of the market. Consumers cannot make the choices that ultimately allocate the use of resources unless at least a substantial number are aware of the alternatives available.

- 3 There must be freedom of entry and mobility. No substantial artificial barriers must exist to prevent new sellers from entering any market. Land, labor, and capital resources must be relatively free to migrate to other uses that may be more profitable.

- 4 Competitors must act as individuals when making economic decisions—particularly pricing decisions. Sellers must not collude by tacit

agreement or otherwise as to prices, outputs, or market territories.

Let us now analyze some of the factors influencing the pricing of selected services within the framework of these competitive criteria. In this way we may begin to gauge the effectiveness of free competition as a regulator of the service sector of the economy.

Available Substitutes

Two factors often make it less likely that the average consumer will consider possible substitutes when he is purchasing services. First, services are by definition intangible, and it is often difficult to establish objective criteria by which the good, better, or best service can be distinguished.

Second, largely because of the lack of standards and of the technical difficulties involved in making comparisons, buyers of services frequently must rely on the good faith and integrity of the sellers with whom they deal. Buyers of goods are protected by various express or implied warranties; these, however, are usually absent in the sale of services. While sellers and buyers of goods usually negotiate at arm's length, the relationship between sellers and buyers of services is often highly personal, even confidential. These personal relationships, it seems, play an important part in the selection of a particular seller of services and frequently can render substitute services less satisfactory.

Consumer Knowledge

It has already been observed that, owing to technical considerations and a lack of standards, purchasers of services may have little knowledge concerning the quality or type of alternative services available. In addition, many sellers of services, particularly in the licensed trades or professions, have strict prohibitions against nearly all forms of advertising. These restrictions make it difficult for specialists or more efficient sellers of services to let prospective purchasers know where they

might obtain more for their money in terms of either quality or price. Defenders of these no-advertising rules, of course, argue that advertising would have a detrimental effect on professional standards.

Freedom of Entry and Mobility

At least twenty-four major occupations are subject to statutory regulation as to entry, and most of these occupations may be classified as belonging to the service area.² While it is obvious that the public interest may sometimes require that there be various restrictions on entry into certain service trades or professions, the real controversy arises when restrictive laws of this kind go beyond protecting the public from charlatans and incompetents and become tools for controlling entry and otherwise restraining competition after the fashion of the medieval guilds.

It is fairly common for the control over entry into licensed trades or professions to be vested in a board made up of members active in the trade or profession. One writer argues that this "... is on a par with giving the American Iron and Steel Institute the power to determine the output of steel."³ Not only do these member boards control entry, but, in most licensing situations, they have the power to revoke licenses. At times, this power of revocation may be used arbitrarily in ways that restrain both member freedom and competition. Furthermore, individual members of the trade or profession may incur substantial losses due to the unfair or arbitrary actions of such boards without having any practical means of obtaining redress.⁴

² Corwin D. Edwards, *Maintaining Competition* (New York: McGraw-Hill Book Company, Inc., 1949), p. 204.

³ See Reuben A. Kessel, "Price Discrimination in Medicine," *Journal of Law and Economics*, I (October, 1958), 29. See Note, "Price Fixing in the Barber Industry," *Indiana Law Journal*, XXXIV (Summer, 1959), 631.

⁴ *New Jersey State Board of Optometrists v. Nemitz*, 90 A. 2d 740 (1952); *Miles H. Robinson v. George F. Lull*, 145 F. Supp. 134 (D.C.N.D., 1956); and *Group Health v. King Co. Medical Society*, 39 Wash. 2d 586, 237 p. 2d 737 (1951).

Individualistic Competitors

In some service trades and professions, "recommended" or "minimum" fee or charge schedules are set by the members or by boards made up of members. The penalties imposed on members for charging below the schedules may range from ostracism to outright revocation of license.

It is also well known that some service fees are set on the basis of the purchaser's ability to pay. Economists argue that it is virtually impossible to maintain this type of discriminatory pricing structure unless competitors agree to cooperate or can in some way be coerced into cooperating.⁵

On the basis of the foregoing discussion, it seems fair to conclude that the conditions and practices found in many service trades or professions may not fit easily into the competitive criteria used to define free enterprise markets. But a similar conclusion could be drawn concerning many of our industrial goods markets. The really relevant question is whether public policy towards noncompetitive practices and conditions has been the same in both areas.

PRESENT PUBLIC POLICY

The Employee Exemption

We can begin our discussion by recognizing that the entire area of employee services or wages represents a broad exception to our national policy of market-controlled pricing. Cooperative wage fixing and other practices related to collective bargaining have been exempted to a large degree from the operation of the antitrust laws. The arguments usually made to justify this broad employee exception are that human labor should not be treated like a commodity and that in the modern corporate age the individual employee does not

⁵ C. Arthur Williams, *Price Discrimination in Property and Liability Insurance* (Minneapolis: The University of Minnesota Press, 1961); and "Price Discrimination in Medicine," 51.

have sufficient bargaining power to secure a fair price (wage) for his services.

Although employee combinations to fix the price for their services are permitted, many sellers of services cannot legally be classed as employees of the people paying them. Doctors, plumbers, and barbers, for example, generally occupy the legal position of independent contractors. The key distinction is that they are employed to accomplish certain results and are not subject to the direction and control of the people to whom they sell their services.

Various sellers of services have on occasion utilized or attempted to utilize this employee exemption as a device for circumventing the antitrust laws. Master barbers, for example, have formed unions and claimed the antitrust employee exemption even though it seems obvious that they are doing business as independent contractors. Furthermore, it seems inappropriate to argue that barbers need this collective economic power in order to protect themselves from unfair bargains made by individuals seeking haircuts. In other words, the rationale behind the employee exemption simply does not apply to most independent contractors.

Although modern court interpretations have greatly expanded the scope of the federal power to regulate commerce in recent years, the federal antitrust laws do not apply to sellers of services carrying on their trade or profession in purely local markets. The U.S. Supreme Court, however, has specifically rejected the argument that service is labor and, therefore, automatically under the employee exemption.⁶ It has also ruled that, where a substantial relationship to interstate commerce can be demonstrated, the activities of members of the learned professions are subject to the federal antitrust laws.⁷

⁶ *U.S. v. National Association of Real Estate Boards*, 339 U.S. 485 490 (1950).

⁷ *U.S. v. American Medical Association*, 110 F. 2d 709 (D.C. Cir. 1940 cert. den.), 308 U.S. 599 (1940). If the sellers of the service are employees, the exemption would apply.

State Antitrust Laws

State courts are in disagreement concerning the application of the variously worded state antitrust laws to the service area. In many states, the state antitrust laws mention only products or commodities when prohibiting price fixing. These laws often lead to decisions that in effect give an antitrust immunity to the local activities of the service trades or professions in the state.

In other states, the antitrust laws outlaw acts in "restraint of trade." Some state courts have held that these laws apply to the sale of services, while others have taken the opposite view. The state courts have been particularly reluctant to include the learned professions within the purview of the state antitrust laws.

Another limitation on the application of state antitrust laws arises out of the fact that state laws must give way if they are in conflict with the federal commerce power. The state of Ohio tried and convicted some unionized contract truckers for price fixing in violation of the state antitrust law.⁸ These truckers owned their own trucks but engaged in collective bargaining to set uniform minimum rentals for the hire of their trucks. The conviction was set aside on appeal to the U.S. Supreme Court on the grounds that the truckers were engaged in interstate commerce, and that, as construed, the Ohio antitrust laws were contrary to federal labor relations laws.

On the whole, it seems that antitrust activity in the service area at the state level has been sporadic and largely ineffectual. Furthermore, certain practical and legal considerations make it doubtful that the states will be any more effective in the future.

FUTURE PUBLIC POLICY

So far, this article has dealt with the increasing importance of the service area in the national economy and the higher rate of price increase in this area than in the goods area. It has been

⁸ *Local 24 v. Oliver*, 358 U.S. 283 (1959).

pointed out that special factors reduce the power of competition to control this inflation. Federal antitrust laws, moreover, cannot control service activities that are local in character, and state antitrust laws have proved to be limited in their effectiveness.

Two questions now arise. Should public policy—state, federal, or both—be revised? What are the alternatives open to public policy in the service area?

Some Public Policy Alternatives

At least four major alternatives are open to public policy in its future dealings with the service area. These are:

- 1 Maintain present policies
- 2 Take positive steps to make competition more effective as a regulator
- 3 Develop substitutes to take the place of competition
- 4 Inaugurate measures designed to offset some of the undesirable effects of the present situation.

Maintain Present Policies.—Maintaining present policies implies that we are relying chiefly on the ability of the various service groups to police their own members in the public interest. There are always some advantages in not rocking the boat. Any basic public policy change in an area involving complicated human relations is almost certain to produce some results that are unpredictable and perhaps undesirable. On the whole, the performance record of most service trades and professions is probably reasonably good.

On the other hand, there are disadvantages and dangers in the present situation. The conflict and lack of coordination in state and federal policies would appear to be highly undesirable. Gaps in the existing system of public regulation make it possible for short-sighted trade or professional groups to arbitrarily restrict the supply of services and to increase the price. In some critical areas a restriction on supply might eventually lead to a situation where extensive public control becomes the only practical solution.

More Effective Competition.—There are several steps that would make competition more effective in the service area. Public policy could be used to counter some of the arbitrary restrictions against entry. One authority, for example, has suggested the following criteria for licensing laws:

"1 The objectives of the licensing program should be clearly incorporated in the law, and those responsible for issuing licenses should be required to base their decisions upon standards appropriate to those objectives. Under no circumstances should the licensing agency have the broad authority to issue or refuse licenses on grounds not clearly defined.

"2 Decisions about licenses should be based on a procedure designed to make unfair action difficult—examination, written statement of grounds for rejection of applicant, and opportunity for appeal.

"3 Licensing officials should be selected for their impartiality. They should have no connection with any interest group whose interests are affected by their decisions."⁹

Public policy could also be directed against various collusive practices related to pricing. Minimum fee lists, for example, might come in for some special attention. Practices of this type are illegal in the goods sector of the economy.

Third, public policy might be directed towards some of the ways in which the various associations in the service area control the actions of their members. There is evidence that individual members of some service associations have at times been deprived of their rights without any semblance of due process.

The competitive approach to the problem has some distinct advantages. Not only is this approach in keeping with our public policy traditions, but it also implies a minimum amount of direct intervention by the government in the day-to-day activities of the trade or profession. Public authority would be used

⁹ *Maintaining Competition*, p. 215.

only to create and maintain an effective competitive framework. Presumably, competition would also bring the price movements in the service sector more into line with those in the goods sector. If this were done, the economy would gain in flexibility, and a faster rate of economic growth might be possible.

There are, however, several major difficulties or disadvantages involved in this competitive approach. First, if really effective competition is to be achieved, it would probably be necessary for state and federal authorities to coordinate their regulatory activities. In many states this would mean new laws and substantial appropriations of money for this purpose. The chances of these measures taking place in the foreseeable future are remote.

It is, moreover, not at all certain that competition of the type outlined can be achieved in practice. The special circumstances and highly personal relationships frequently found in this service area may make some forms of competition undesirable. In fact it is conceivable that competition might have long-term detrimental effects that would outweigh possible benefits.

Moreover, it might be extremely unwise to insist on rigorous competition in the service area with so many areas of our economy exempt from this policy. Not only is wage fixing exempt, but there are also fair trade laws, laws prohibiting sales below cost, laws regulating oil production to "demand," and laws giving farm cooperatives, railroads, and insurance companies certain exemptions under the federal antitrust laws.

Substitutes for Competition.—A variety of measures are traditionally suggested when competition breaks down or appears to be inappropriate as a spontaneous regulator in a particular area of economic activity. In this country, direct regulation of both rates and service has been used as a substitute, and, to a lesser extent, public provision of the needed service. More recently, the marshalling of public opinion through open and well-publicized hearings, especially on pricing matters,

has been proposed. Countervailing measures by consumer groups, such as the Kaiser medical plan on the West Coast or various non-profit funeral expense plans, have been experimented with on the supply side of the market.

However, our own experience with public utility regulation and the European experience with nationalization have shown that neither gives the unqualified good results that the social reformers have suggested. Regulation is hampered by the absence of operational standards of "reasonableness," and by the hardening of the economic arteries that seems to accompany massive governmental intervention. Nationalization in many cases has merely substituted public bureaucracies for private ones—a change that the client often finds has no effect on the organization's responsiveness to his needs. Yet, there is much to be said for the argument that, even in the economic realm, bad self-government is to be preferred to enlightened despotism—if this must be the choice. Because of the disadvantages inherent in regulation and nationalization, however, both will probably continue to be used only as a last resort.

The systematic use of publicity deserves further consideration. It proved to be an extremely useful device back in the OPA days, and even today, when big labor and big business start to gang up on the public, it has proved to be an extremely useful restraining force. Consumer countervailance has possibilities, too, in a few limited areas, but it is severely handicapped by the immense difficulties of organizing consumers on any extensive basis.

Measures to Mitigate the Present Situation.—Of late, there has been much publicity concerning the rising cost of medical care. Public and private health insurance programs for the aged, aid to low- and middle-income families for the care and rehabilitation of crippled or handicapped children, and supplemental public assistance to low-income families to help them secure some minimum of medical care illustrate various approaches that might alleviate some of the hardships in this situation. On

the supply side, measures to increase the output of medical schools, such as grants-in-aid to needy medical students, the establishment of new medical schools and the expansion of existing ones, and public pressure to remove unreasonably restrictive admission policies where they exist have all been proposed.¹⁰

In other service areas, measures like transport subsidies and rural electrification assistance have been used with some success. The principal advantage of all these measures is that they may remove various undesirable side effects in certain service areas pertaining to public welfare with a minimum of government interference. And since the private role still predominates, these offsetting devices are probably less objectionable than most of the alternatives. Unfortunately, we have not been especially creative in inventing new ways to extend these types of offsetting measures.

The principal shortcoming of this approach is that it fails to come to grips with the basic

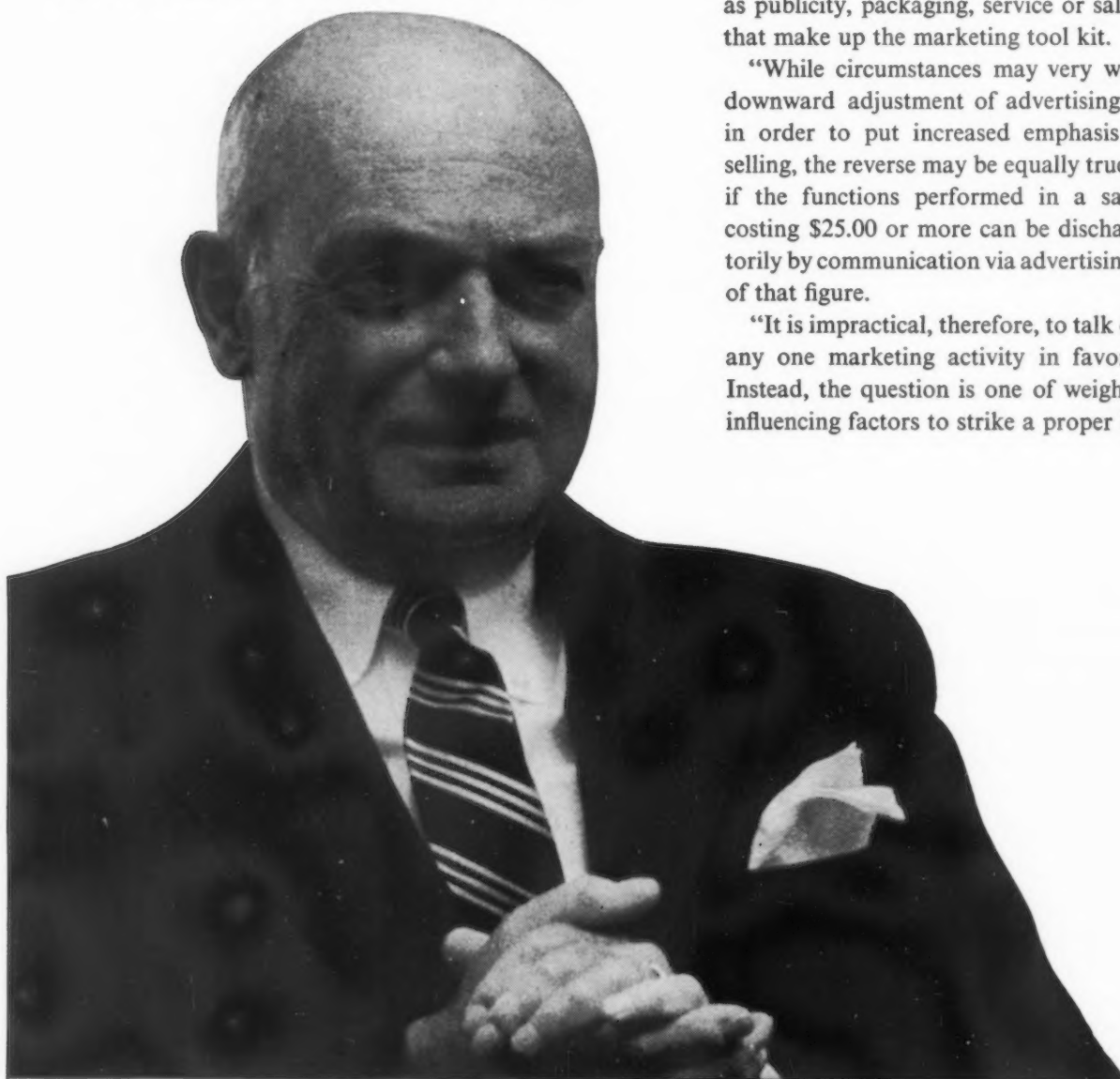
problems. It treats symptoms rather than causes and completely overlooks possible problems of misallocation and stunted productivity.

NONE of the four classes of public policy alternatives discussed appears to be completely satisfactory. In fact, most of them are operationally deficient or politically impractical. Clearly, the real need is to systematically direct our creative talent and our imagination toward developing new public policy alternatives in this vital area. We should, of course, avoid the mistakes of the past, but it is unquestionably foolish to confine our search for measures that will solve the pressing problems of a changing society merely to approaches that have been used in the past. Indeed, these alternatives were themselves novel innovations in their day. Lend-lease, foreign aid, and unemployment compensation were all creative departures from the prevailing set of public policy alternatives. The supermarket concept and the concept of mass production are examples of innovations in the public interest in the private area of the economy. It is now time that we set about discovering new ways of coordinating our economic goals and of using our resources not only efficiently but also for worthy ends. Nor is there any reason why the various service groups cannot take the lead in suggesting innovations or reforms for their own trades or professions. Indeed, our legislative history indicates that they cannot afford to do less.

¹⁰ See Department of Health, Education, and Welfare, *Physicians for a Growing America*, Report of the Surgeon General's Consultant Group on Medical Education (Bane Committee), Publication No. 709 (Washington: U.S. Gov't Printing Office, 1959); and U.S. Congress, Joint Economic Committee, *Trends in the Supply and Demand of Medical Care* (Joint Committee Print), 86th Cong., 1st sess. (Washington: U.S. Gov't Printing Office, 1959), p. 84. The Hill-Burton program of federal aid for the construction of health facilities has been successful in stimulating states and communities to increase the supply of hospital beds, public health centers, nursing homes, and other health facilities. This type of program could be expanded to ensure that an adequate supply of resources is devoted to medical care.

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TECHNOLOGICAL HORIZONS

Robert C. Turner
EDITOR

ENERGY AND THE UNDERDEVELOPED AREAS

by Fred Cottrell

NO ONE can fail to sympathize with the people of the underdeveloped areas of the world in their efforts to improve their lot, and the people of the Western world cannot fail to respond to their plea for aid in their efforts to industrialize. Most of us are agreed that whatever Western aid is necessary should go at least to all those who seek a noncommunist solution to their problem. If we are to be successful, however, we must examine carefully the conditions under which the desired changes can be brought about and determine whether all of these conditions can, in fact, be realized.

These conditions may be described in psychological, sociological, cultural, political, or economic terms; they may also be described in biological and technological terms. The exact combination of conditions necessary for the effective operation of an industrial society is not well understood, however, and even if it were, it would be beyond our capacity to describe here.

On the basis of the evidence

now available, the biological and physical barriers to industrialization appear so great in some areas that it is questionable whether the other conditions can be achieved. In some cases it seems impossible that the barriers can be overcome, and in others the cost of surmounting them is so high that the effort is likely to be abandoned before a breakthrough can be achieved. Our purpose here is to demonstrate some of the technological changes that occur and the costs involved in achieving them.

ANY CLASSIFICATION of societies that places the underdeveloped society at one end of a continuum will place at the other end the society that is in possession of much more material wealth and much more power.

Material wealth can be measured in terms of costs and their value, and these can be stated in terms of a market price, as well as evaluated by institutions such as the corporation, the family, the church, and the state. But cost may also be measured in biological and physical terms, and these terms may prove to be as useful in predicting the future as any other measure.

To the degree that work is required to produce things or perform services, costs can be measured in terms of the energy required for their production or performance. These costs must be paid in energy. Study of the energy available as compared with the work required to achieve a given end will show whether or not the end can be achieved. Though, of course, it should be borne in mind that, even where the energy to achieve a given end is available, it may be allotted to the production or performance of other, more valuable goods or services.

Thus, one of the first questions to be asked concerning the prospects for the development of a given area is, "Where is the necessary energy to come from?" Part of the answer is to be found in natural energy sources—coal and oil fields, arable land, minerals such as uranium and thorium, and flowing water. Another part is found in the ability of the people located near these sources to make them available in the necessary forms at the proper time and place.

The most important question, however, is, "What is the ratio between the population and the capacity of the energy converters available to it?" Ultimately, this factor determines the available energy per capita and the amount of material goods a society can produce. By converter we mean any instrument through which energy can be converted from one form into another. Man's own body is a converter. On the average, he can convert less than 3,000 calories of energy per day from food into various other forms, and only about 20 per cent of his energy input can be converted into mechanical energy. The best-fed population can, on

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the average, utilize less than the equivalent of 600 calories per person per day of mechanical energy—less than one horsepower-hour per day. In a village where men are the only sources of mechanical energy, the maximum amount of work that can be done can be determined by counting the population. Work that requires more than this amount of energy will require another converter.

An additional converter often used in underdeveloped countries is the draft animal. These animals, however, consume some plants that would also support human life, and in some cases the land used for feed might instead be providing food for men. Where the population depends mainly on local land to provide plants for human consumption, the draft animal competes for survival with man. Although the

horse can produce roughly five times the mechanical energy a man can deliver in a day, he also consumes five times as many calories. As a result, the horse is likely to be replaced by men as population pressures increase.

THE LIMITED capacity of land to produce food is a familiar fact. A family that has resided on the same land for five hundred years needs no Malthus to point out that the land's capacity to produce is limited. The plants yielding larger amounts of energy generally take more sustenance from the land, and unless the scarce minerals in the soil (such as nitrogen) are replaced, future crops will suffer.

In the last few centuries, the sailing ship has enabled the cultivator to carry his techniques into empty continents. Helped by

new plants with a greater power to convert sunlight into food energy, new techniques of cultivation and irrigation, and the development of fertilizer, Western man seemed for a time to have escaped Malthus' law, and those who warned against the dangers of overpopulation fell into disrepute. A brand of economics developed which held that since land became more valuable as it became more scarce we could all get rich from the unearned increment on land. This phenomenon is well known in undeveloped areas where land has fallen into the hands of landlords who exact inordinate rents. That the landlord is sufficiently enriched to enable him to buy in urban markets in no way offsets the worsening poverty of the peasants.

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we may see why our economic theory has not always produced the expected result in the underdeveloped world. Any plant has a limited capacity to convert sunlight and inorganic materials into organic products. Some plants, such as wheat or maize, can convert as much as two- or three-tenths of 1 per cent of the sunlight falling on them in a growing season. Others, such as hay, can convert less. All will respond to favorable conditions such as fertile soil and abundant water and sunlight and will yield proportionately less under adverse conditions. The factor that sets the outside limitation on a population, then, is the capacity of plants to convert sunlight into other energy forms. If we combine the facts of arable land and the limited capacity of plants to convert energy, we seem to find no food source that can be endlessly extended.

THE OUTSIDE limit is thus set by the energy it is possible to obtain from plants. But not all of this energy can be used at the whim of those who obtain it. Some must go back into the ground as seed, and where plants are cultivated, some additional energy must be used in that endeavor. Where more elaborate methods of securing energy are adopted, the energy required to produce tools or machinery must be subtracted from the energy obtained with their use. The difference between this energy input and the energy output it makes available is surplus energy, according to my definition. It is the per capita surplus energy that sets the limits and provides the means for man's advances in his struggle for survival.

The amount of surplus energy available is a function of geog-

raphy, technology, and social arrangement, but extreme efficiency in the social and technological arrangements cannot expand the limits set by nature. One piece of land may, with careful cultivation, produce plants yielding 700,000 calories per acre, while another, despite poor cultivation, may produce a million. Under neither system, however, can the energy yield be, say, doubled or tripled. Moreover, the system getting the largest return in the form of food may expend two or three times as much energy in raising that food as one yielding a smaller total does; thus, the surplus energy from such a system may actually be less than that from the one yielding less total energy.

If, in the effort to maximize the amount of food, surplus energy is reduced, the amount of other goods and services that might have been produced with the larger surplus is diminished. In underdeveloped areas, much of the land has been cultivated far past the point of maximum surplus. But if, in order to gain the things that might be obtained with larger surplus, men were removed from cultivation and it became less intense (yielding a larger surplus), the total food supply would fall and with it the means to sustain a larger population.

History will show how this situation was avoided in the West. The discovery of nearly empty continents permitted draft animals to multiply to the point where, with their aid, one man and his family could cultivate large areas of land. The surplus energy per acre was not necessarily increased—in fact, it was frequently lowered—but the surplus energy per man-hour engaged in cultivation was tremen-

dously increased; as a result, large amounts of man power were released for other activities. It is at this point that the difference between the underdeveloped world and the industrial world becomes apparent. Old societies continued to use men because they were numerous and cheap. Because men needed food to survive, more food was produced. But the productivity of the system was limited by the capacity of men working on the land to produce surplus energy. The number of people who can be fed is determined by the amount of food that can be raised, and the number of these people who can be utilized for work other than farming is determined by the energy required in farming itself. The Japanese farmer, one of the most efficient in the world, produces surplus energy about twelve and a half times as great as the energy consumed by his body in production, but most agricultural societies do not approach the Japanese maximum. In some areas this is due to social and psychological factors, in others to a shortage of water or to less fertile land. The amount of surplus energy derived from agriculture is relatively small and the prospect of increasing it is not great. On the other hand, with the increasing population, the production of food requires more effort, even if this effort reduces the amount of surplus energy available.

Food was made abundant in the West by turning to surplus energy from sources other than plants. In areas where population pressure made the use of animals ineffective, conditions similar to those in Asia set in. But these were offset since food sources from distant points were tapped by railroad and ship. The introduction of the tractor during



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World War I permitted the use of petroleum, a fuel source from which a tremendous supply of energy could be obtained. Where abundant land and sparse population now exist in underdeveloped lands the same solution might be used—but few such lands exist. It should be recalled, however, that increased productivity per man-hour in agriculture in the West was in many cases secured by production of fewer pounds of food per acre and decreased surplus energy per acre. Reverting to our comparison, the Japanese farmer, using hand labor, produced the same amount of rice per acre as did an Arkansas farmer using irrigation, fertilization, and mechanized cultivation and harvest methods. The surplus energy produced by the Japanese was over a thousand horsepower-hours per acre while that of the Arkansas farmer was a little over three hundred. Introducing the tractor in Japan would not have the same result as in the United States. Even though there would be no increase in the amount of rice produced, there would be an increase in production costs. This increase would make it necessary to sell some rice, thereby depriving the local community of its use. It has been estimated that in the United States today more energy goes into agriculture than comes out of it; a system operating in this manner could not be self-sustaining in an area wholly dependent for its energy upon agriculture.

It is fairly well established that the amount of surplus energy gained by putting men to work in agriculture is small and becomes smaller when these men are replaced by machines. On the other hand, the surplus may be enlarged by such measures as seed

selection, intensive cultivation, fertilization, and the use of insecticides, but these measures, too, are limited. The law of diminishing returns is as evident in these cases as in the growing poverty of overpopulated areas.

IN THE WEST, where population has not yet grown so rapidly as to overtake the gains made through these methods, it is still possible to manipulate energy sources. Increased power from coal or falling water in the form of electricity or from petroleum in the form of fuel can be introduced to increase the output per man-hour in agriculture. Since it is not the amount of food produced that is being maximized, but the difference between price-measured cost of inputs and price-measured outputs, it is considered desirable here to industrialize agriculture even though little or no surplus energy is produced in the operation. Because surplus energy in other forms can be produced in such great amounts, the diminution of the surplus goes unnoticed. But in a community supported only by the work of men and the products of their toil, surplus energy from the cultivation of food is the primary measure of well-being.

A consumer of food may offer to the food raiser goods that have been produced with the aid of energy from, say, coal or petroleum. The energy cost of such goods may be a hundred times the energy to be obtained from the food. On the other hand, if the food raiser offers handmade goods for sale he finds himself competing with all of the other means by which identical objects (or those that can be substituted for them) may be produced. The consumer of such objects will not care whether they were made by a food-fueled, expensive artisan,

or with the aid of another fuel whose producer could obtain, in a day, a thousand times more energy than the food raiser. Thus the producer who must use men in production, where his competitor in the market or on the battlefield can use converters fueled from high surplus sources, faces an impossible task.

The Japanese rice grower, for example, produces less than thirteen horsepower-hours per day surplus energy. If he is paid even one dollar a day for that endeavor, the energy he produces has cost about eight cents a horsepower-hour. On the other hand, an American coal miner earning \$18 a day produces so much surplus energy in the form of coal that his efforts cost the consumer only about one-tenth of a cent per horsepower-hour. It is obvious, then, that the consumer will, where he can, choose goods produced with the cheaper form of energy.

In the underdeveloped areas, the consumer produces his own food or employs men rather than machines to produce it. Those who seek to industrialize must either use in industry those who formerly raised food or leave them to subsist in other ways. Some will be employed, but, since high-energy technology can produce many more goods using limited man power than can a large number of artisans, others will be unemployed. Some of these may turn to more primitive means of subsistence. Others, incapable of producing in competition with the machines anything they can sell for enough to buy food, starve. The food they might have eaten is eaten instead by the machine builders and operators, those who produce fuel, and others to whom emerging social

organization gives a claim on food.

HUMANITARIANS both at home and abroad have urged that the limited number of high-energy converters in underdeveloped lands such as India be used to provide food for the starving. One way to increase the supply of foodstuffs, for example, would be to increase the amount of synthetic fertilizer available, thus providing larger crop yields. The manufacture of this fertilizer requires large quantities of energy. Thus, energy from a hydroelectric plant might be used to provide food for a given number of people, but the people thus saved would be unable with their own bodies to build another plant of equal capacity. As a result, they could neither replace the existing converters as they wore out, nor build new ones to supply the fertilizer required to produce the crops with which to feed their children. Railroads transport food to places where, in the past, famine would have prevented overpopulation. Foreign loans are floated to feed millions who cannot hope to produce enough to repay them. Five-year plans are designed to industrialize, while at the same time unemployment calls for the utilization of men, not machines.

If these demands for converters and fuel were small it might be possible for the Soviet Union or the West to dump large amounts of surplus energy into the system, permitting it to generate sufficient energy to become self-perpetuating. But the amount of capital required probably exceeds the capacity of both systems. Faced with their own exploding populations, neither private capitalists nor imperialists of either capitalist or com-

munist variety seem likely to undertake the difficult task of meeting even the physical costs of industrialization.

One solution that could possibly occur is ruthless exploitation of the populations of underdeveloped regions by their own people. This would result in their being slowly starved to death and prevented from breeding while working to build high-energy converters. The Soviet Union apparently was able to do this through its political prisoner camps, but it is doubtful whether the communists would attempt this solution in China, where the population currently increases by 15 million a year. Another possible solution may be one that China has used on a number of occasions in the past. By means of irrigation, intensive agriculture could be carried on that would sustain the agricultural population, and public works could be constructed using man power almost exclusively. At the same time, the population could be held rigorously in control through food rationing. The surpluses from such an operation could be controlled by a land-controlling elite that would trade surplus food for the products of a small industrial elite. However, neither elite would be interested in sharing the surplus with the great peasant mass. Of the three likely solutions, this seems to me to be the most probable in the long run.

With our limited knowledge of the processes involved in technological change, it is difficult to predict the future of underdeveloped areas. But our predictions might be much more accurate than they now are if we studied energy flow from source to end product, as well as psychosociological evidence.



Lois Shepherd Headings

EDITOR

book notes and reviews

Life consists in action, and its end is a mode of action, not a quality. (Aristotle)

There is a round of activities found in management. (Erwin H. Schell)

MANAGERIAL POLYPHONY

ONE OF the greatest advances in Western music was the invention of the measure. Adding time measurement to the melody line made possible the synchronizing of other melody lines to produce counterpoint, and eventually harmony. In somewhat the same way, the authors of a new management book would add the device of time measurement to the flow of movement and activities within an organization—first, to build an efficient structure, and second, to maintain its stability through change. The book is **THE MEASURE OF MANAGEMENT: DESIGNING ORGANIZATIONS FOR HUMAN EFFECTIVENESS** by *Eliot D. Chapple* and *Leonard R. Sayles* (Macmillan, \$6.50).

As organization theory, the book attempts to find a middle road between traditional theory, epitomized by the formal organization chart, and the human relations approach, which would build out from personalities. This middle road would rest on a foundation of empirical studies; it would depend upon direct observation of all levels of activity within the organization, recorded in the unambiguous behavior terminology of the an-

thropological fieldworker. These studies would in reality be expanded time-and-motion studies, including the whole system of people, paper, and material, but emphasizing the person-to-person flow of work. All of this flow should, in the authors' view, proceed naturally and logically from the technology of the organization and indeed, in their plan of organization design, it would. But before further generalizing, we should follow the order set out by the authors in presenting their plan.

In the introductory chapter, the authors define their position on the subject of "the management of people: production management, organization, human relations, and administration." (pp. 1-2) They find formal organization theory unrealistic because its organization-chart approach is mainly devoted to the preservation of authority and because it postulates as a counterpart to rational economic man a rational administrative man. On the other hand, they point out that the human relationists' reaction to formal theory led to excesses, which are in fact now under counterattack, and that one of

the excesses was the pessimistic conclusion of Chris Argyris that the ends of the corporation and the needs of the individuals involved are basically and irretrievably incompatible. This last, the authors believe, is a result of prematurely accepting the arbitrary distinction between formal and informal organization. This state of affairs results from an artificial separation of management (with its tendency to design the organization functionally from the top) and industrial engineering (with its efforts to design the organization operationally from the bottom).

"It is commonplace to say that the organization exists solely to accomplish the job for which it is set up, yet the implications of such a statement have hardly been realized. A comparative study of both simple and complex organizations in American and other cultures clearly suggests that work flow and the administration processes by which it is controlled are fundamental in shaping the realities of the organization viewed as a system of relationships. In this view, which represents the authors' theoretical position, organization is the resultant of the layout, techniques, processes, and controls, or technology in its broadest sense, of the formal structure of authority as represented in charts and manuals of standard operating practice, and of the individual personalities within it." (p. 9)

And later:

"The authors contend that a more realistic middle ground must be established. To the administrator concerned with the problems of developing an organization, management is a constant process of tinkering with people, with the jobs, and with the structure of authority to create the teamwork necessary for improved performance.

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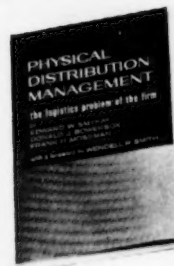
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capacity and experience, he has had few tools to combine people and jobs. He can get the techniques of planning the flow of work without regard for personality from industrial engineering, some empirical notions about formal organization structure such as line and staff, span of control, etc., from the philosophy of management, and a variety of testing procedures intended to provide some information about the individual from psychology. But, when the executive tries to put together these three kinds of information and their underlying principles, he is in trouble." (p. 98)

One of the by-products of the human relations approach, the authors point out, is the fear that organizations necessarily threaten the psyche and produce "organization men." However, they maintain, people "have always demanded structure in their lives" (p. 12) as the permissive-child-rearing revisionists have learned. Furthermore, the intense cooperation demanded of a string quartet or a ballet troupe has never been considered damaging to the individualities involved.

In concluding their introduction, the authors specifically list the main points to be substantiated in the following chapters.

"1. Management as a profession can be more science than art; intuitive skills can be replaced by learnable techniques of administration.

"2. Measurements, providing criteria for management action, are basic to all organization and administration decisions, and human behavior in the organization is quantifiable.

"3. The organization of work—technology, methods, and systems—must be undertaken as a preliminary to, and by principles consistent with, the development of the total organization structure and techniques of administration.

"4. Hierarchical organizations are not inconsistent with individual satisfaction and development, nor are

organization routines and controls necessarily stifling and debilitating to the personality.

"5. Human satisfaction and productive efficiency are compatible objectives for a company or any organization." (p. 17)

The first of the book's three sections, "Building the Organization and Measuring Its Performance," reminds one of an exposition of organic architecture in its emphasis on building from the inside out and using materials structurally appropriate. The technology that forms the basis of the organizational design is explained as "who does what with whom, when, where, and how often," terms quite different from those normally used by industrial engineers. Especially to be avoided is the grouping together of people and activities simply because they are involved in similar functions. The total work flow of people, paper, and materials is broken up, according to the authors' plan, into "unit work flows," each under a single supervisor. Each unit also includes all individuals who help maintain the flow: mechanics, service people—in fact, any staff members needed are included. In this proposal, staff members are relegated strictly to advisory positions. Staff heads are responsible for quality only; production responsibility is reserved either for the supervisors of the unit work flows or, above them, the manager responsible for coordinating the units into a larger system.

"Studies of the informal organization discuss how people actually relate themselves to each other in the process of getting the work done. Thus, the pattern of relationships that evolve in completing the job is what some observers consider the uncontrolled or spontaneous aspect of the organization. The authors believe this aspect must be the ob-

jective of the consciously contrived organizational structure. The organization must be designed for people not in the hope that people will somehow fit into it. . . . All the factors required to get the work done should be concentrated under a single person with responsibility centered at the lowest managerial point, not at the highest, as in the examples where top management officials were constantly arbitrating interdepartmental disputes." (pp. 40-41)

How are the units combined into a work-flow system? Not by an arbitrary setting of some number of individuals or abstract responsibilities for various levels of supervision or management, but by an analysis of the available controls for maintaining the system, which is basically a rigorous spelling out by the authors of the old rule of "management by exception":

"The span of [the supervisor's] control, using management terminology, depends *not* on the number of people to be supervised but on the frequency and duration of disturbances within his work-flow unit and the length of time required for him to correct them." (p. 73)

The new type of job description for determining the work flows stems directly from the famous Mayo studies, especially the one conducted in the "Bank Wiring Observation Room." (In this study, an observer sat in the back of the room making daily records of what he heard and saw, and an interviewer worked with each man on a regular basis. This method has since been refined through the "interaction chronograph.") The principal innovation is the description of job content in terms of exact interactions, an example of which is given by the authors. The second step consists of grouping these interactions into patterns of activity such

as "advising," "analyzing data," "initiating action," and "transmitting inquiries." The crucial element of time is then added in the third step: these patterns of activity are measured by frequency and duration. The number of patterns will vary greatly from machine operator to executive, as will the span of time necessary to encompass the range of the patterns. These patterns, we are assured, are equally measurable or quantifiable. The authors note an important by-product of the managerial job's susceptibility to time analysis:

"In assessing the relative cost advantages of new processes or systems, companies often neglect the managerial cost component. Of course, they calculate the number of supervisors to be assigned directly to the new activity; but they overlook the ways in which the new work-flow system may involve many levels of management above the one directly responsible for its operation as well as the supporting staff personnel utilized for emergency operations. Unfortunately, higher management is frequently doing the job of a first-line supervisor. If these managers were compelled to record the time they spend in a subordinate's department and took this expenditure of managerial time into account, the real costs of many departments would soar astronomically. Unfortunately, accounting traditions do not encourage this, and, as a result, managerial time, the most expensive and scarce resource of an organization, is frequently dissipated." (pp. 59 and 61)

By making repeated sampling observations and interviews, personality variations can also be taken into account, and ranges of time deviations and statistical limits can be calculated. It would thus be possible to ascertain not only how much an executive varies in his time distribution

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from limits set by previous performance, but also "whether this is correlated with changes in performance on other jobs that require him to spend additional time restoring operations to standard or [reflects] an individual shift in attention or competence." (p. 64) Or, stated another way, interaction analysis would be useful for assessing the man-

ager's work load, judging it by that most precious element—time: Is the manager's span of control too wide or too narrow; is he overworked or underutilized?

Control under this system consists principally of detecting deviations within the work flows that signal inefficiencies or potential breakdowns. After the manner of

quality control, statistically defined limits can be set up for total work flows as defined by the authors. Therefore, instead of having to build a new position around each problem and clogging organizational channels with unnecessary interactions, management has the means at hand to isolate and correct the incipient problems structurally.

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The authors specifically criticize the traditional measures of managerial effectiveness, auditing procedures. Too often, they say, this method results in the devotion of more executive energy to the manipulation of figures than to the improvement of productive efficiency. As a means of control, financial statements—ancient history at best—are useless in pin-

pointing responsibility. (The authors do note, however, that some progress has been made in dealing with these problems in "management accounting," but hold little hope for significant success.)

Taking due account of work-group behavior, the authors conclude that management creates some of its industrial relations problems through its technologi-

cal decisions. By examining the interrelations between technology and work-group behavior, management is enabled at least partially to predict which areas are likely to demand special attention and the kinds of attention most likely to restabilize work patterns.

"The criterion for a good group is not found in its expressed atti-

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tudes toward management. Many complaining, apparently disgruntled, and protesting groups (who score consistently low on plant attitude surveys) take in stride methods and personnel changes that would upset other groups and still maintain their productivity. The criterion is therefore related to the behavior of the group when its members are under stress. Differences in the way groups react to and resolve or add to the stress can be described in observable interaction patterns." (p. 97)

In part two, the authors discuss "The Individual, His Personality and His Job."

"The success of a business depends upon the degree to which the total personality resources of the company have been assessed and utilized and effective working relationships developed in an organization, that is, upon the realities of human interaction." (p. 113)

Assessing these personality resources, the authors emphasize again the need to define organizational responsibilities in terms of the various processes necessary to operate the business, rather than in such phrases as "he shall supervise" or "he shall co-ordinate." Only then can one learn "to distinguish between the places where stresses occur between people as a result of bottlenecks in the work flow, poorly defined responsibilities, or clashing personalities. In practice, these crucial distinctions are often blurred in the confusion of recurring crises." (p. 112)

Since an essential element of the interaction pattern is personality, how is personality to be described and evaluated in the system? Not only, claim the authors, are psychological tests of the sort now in organizational usage a serious invasion of privacy, but the terms and concepts employed in them often fail to help the ad-

ministrator identify the kind of performance to be expected of the individual. However, they find subjective performance appraisals to be of little more help. To say an individual is warm and friendly but hard to get to know is relatively useless in predicting his response to a particular situation or new job responsibilities. What is needed is direct observation of behavior on the job.

The criteria for such observation "must be such that they can be applied to any situation with the same results. Two observers must not be able to arrive at different interpretations." (p. 117) Measurements of how individuals normally act under stress and after stress will provide the manager with the basis for calculating reliable indicators of performance. (*Stress* is defined as the occurrence of marked behavioral deviations from a person's characteristic actions and inactions and results from three main kinds of interactions: encountering opposition or competition or generating it; not receiving the response one's particular personality requires from other people; and contacting a stranger or an individual to whom one is not yet accustomed.) The authors provide, as well as examples of observations that reveal personality, a check list of personality traits and temperamental reactions based on such observations.

"Although precise measurements of the personality and temperament characteristics described require controlled interviews, timing instruments, and trained personnel, every executive should be able to improve his own observational skills to evaluate managerial capacity. Through training emphasizing the observation of individual behavior in time, selection and placement decisions can be improved substantially. Unfortunately, most managers

assess personality largely in terms of their own reaction to what an individual says, the attitudes and points of view he expresses, and their relationship to the executive's own sentiments." (pp. 136-37)

As for the role of psychiatry in handling personality problems in organizations, the authors would integrate the psychiatrist with other medical specialists in an approach similar to that of "comprehensive medicine." They do not find it feasible to separate mental well-being from physical well-being in dealing with employee health problems, and they again trace both to stress points within the organization.

"In other words, the authors believe psychiatry cannot be practiced, in corporations at least, independently of the process of measuring both the individual's personality and temperament traits and the interactional stresses of the particular job. The organizational situation, therefore, is decisive. It provides the environment that sets off emotional disturbance in vulnerable individuals; so it must also provide the administrative means by which such disturbances can be corrected or alleviated. Psychiatry and the psychiatrist, however useful, cannot singlehandedly take over the responsibility or provide the techniques for organizational analysis and decision." (p. 151)

The third part of the book, "Managing Instability and Change," begins with the discussion of morale, "the measure of organizational health." Unfortunately, say the authors, morale studies are usually based on subjective criteria—in other words, on how the group feels instead of on how it behaves. As a result, what usually is called "morale" has little predictive value, although management badly needs some way of assessing effectiveness of and exercising control

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over personnel activities. The authors would associate morale with equilibrium (not to be confused with inflexibility). "From the point of view of organization, . . . the problem of morale is one of obtaining a state of equilibrium in the relations of the constituent individuals." (p. 159) High morale is a state of equilibrium "such that disturbances to the equilibrium bring about changes in the interaction rates that are within the normal limits of adjustment and quickly followed by a restoration of the system to its equilibrium. . . . The greater the stability and the more rapid the restoration of equilibrium, the greater the morale of the organization." (p. 160)

To accomplish such equilibrium, the company must provide (or rather, its system of organizational relations must provide) habitual channels for compensatory reactions, and its organization structure itself must be designed "to minimize the possibility of stress by placing individuals into jobs with matching interactional requirements and by eliminating points in the flow of work that might become sources of conflict." (pp. 168-69)

Such high morale, or equilibrium, is particularly necessary, the authors state, in times of accelerating change such as ours when companies are facing merger movements, increased efforts at diversification, automation, and changing concepts of administration. Actually, much instability has been disguised by the unusual advantages of "pre-eminence in the market based on successful capital concentrations, patent protections, and control over distribution channels." (p. 168) What might these advantages produce, speculate the authors, if internal stability would

allow the companies to fully exploit them?

Morale, then, is not something apart from the production and work activities of the organization. "On the contrary, its source lies in the same pattern of successfully designed and functioning organization routines as productivity." (p. 169) Even in the ideal state of equilibrium, the organization faces the problems of disturbances from institutions outside the company. Even seemingly abstract economic and political forces can affect the interactional patterns of the organization, principally by creating family disequilibrium. This wheels-within-wheels effect is discussed only briefly by the authors in the final chapter, and there in moral terms.

The impact of outside organizations on the internal equilibrium of the company is discussed

more fully, however, if one considers unions to be "outside." Ideally, according to the authors, the union should be a stabilizing mechanism—an outlet for its members enabling them to adjust to the pressures created by new techniques, new standards, and new personnel. When it fails in this, it only adds to disequilibrium. In general, the authors approve of the recent attempts at union-management cooperation, but they point out that the most farsighted do not neglect the important compensatory function of union activities; instead, these efforts attempt to relate redress procedures to the production system. That the difficulties inherent in such attempts are many and the requisite balance a tricky one should not discourage those involved.

At this point the authors summarize their approach and its

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differences from others in terms of introducing change into the organization. They contrast what they say is the approach that has recently received the most attention, that of "changing people through efforts to modify their attitudes, values, and feelings, that is, by 'working on their personalities,'" to their own point of view, that "the most efficient way of accomplishing change is to modify the organization itself: the technology, systems and procedures, layout, controls, and the positioning of individual personalities within the organizational structure." (p. 191)

The first approach, which the authors subsequently abbreviate to "change by conversion," presupposes that the major part of any organizational problem can be traced to the managers' ineptness in handling people. The traits of reflectiveness and self-

analysis that this approach requires, however, are seldom found in managers—not that so few managers are convinced that human relations methods are good and right, but that while believing, they find it impossible to act upon their beliefs. "Students of organizational behavior need to realize and accept the limitations of human beings in organizations." (p. 194) Some people, of course, do achieve a better adjustment through "insight" or "understanding," say the authors, but there still remains the very real possibility that, without consideration of factors growing out of the organizational structure, such "adjustment" may be merely the creation of "a more sophisticated state of frustration for the individual." (p. 201)

On the other hand, argue the authors, if one wants lasting change, he must not try to change

people but, instead, the organizational constraints that operate upon them.

"By changing layout, changing material handling, changing methods of keeping records, or changing a hundred and one things that are built into an industrial organization, a reorganization and re-formation of relationships can be achieved naturally and inevitably." (p. 202)

Over-all, the authors feel hopeful that the use of such interaction measurement as they propose here can be applied more widely than just to business organizations, with the utopian possibility that in time organizations can be fitted to the needs of the people involved, rather than creating organizational strait jackets that make it difficult or impossible for people to realize their full abilities.

In their final chapter the authors look at some of the broader issues of value and propriety under the title "New Responsibilities for Executives." They find no dichotomy between specialization and general administration: a manager must master the fundamentals of all the various specialties, no matter which he started from at his outset in the organization, in addition to mastering a series of administrative techniques. Here again, the clue is in the nature of administration, from the point of view of the authors' system. They term as "folk knowledge" what comprises the content of most writing on management: talk of line and staff, the span of control, committee management, decentralization, and outline rules by which the manager delegates, communicates, and coordinates. Administrative techniques, they say, are administrative techniques at any level and are not confined to any one specialty.

Arthur O. Lovejoy, *THE REASON, THE UNDERSTANDING, AND TIME* (Johns Hopkins)

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Walter Sullivan, *ASSAULT ON THE UNKNOWN: THE INTERNATIONAL GEOPHYSICAL YEAR* (McGraw)

J. Tuzo Wilson, *IGY: THE YEAR OF THE NEW MOONS* (Knopf)

"The manager of the future, then, will have been trained in the administrative specialties, have a repertory of each and a solid grounding by which he can recognize the situations in which they should be applied. And this latter knowledge, because situations are necessarily organizational in the proper sense, will be based on a science of organization and, in the sense the term was used by Henry Dennison, Mary Follet, and other pioneers in the field, on the professional practice of organizational engineering." (p. 210)

As the professional manager consolidates his position—that is, as decisions can be based on objective evidence—"the problem of choice and the moral responsibility for choice will become more evident." (p. 212) Referring to Chester I. Barnard's *Elementary Conditions of Business Morals*, they repeat his thesis that the religious codes dealing with personal ethics have little application or relevance to the moral problems of the world of affairs. They quote in particular Barnard's comments on attending a conference of the Federal Council of Churches of Christ on this subject:

"I observed that whenever the discussion related to public or business affairs, the assumptions as to the nature of such affairs seemed to me quite unrealistic. Whenever an attempt was made to apply a moral precept, it seemed to me to be substantially irrelevant; and what seemed to me the essential moral dilemmas of business and public affairs were evidently not contemplated at all. Why? Because, I thought, the facts of business life were not available." (p. 213)

Whether Barnard meant "not available" to the conference or just plain "not available" is not clear, but for Sayles and Chapple there are no *facts* about life in business organizations beyond a few scattered studies, most of

which deal with the most elementary units in the structure. It is their earnest desire to make a start toward remedying the situation.

REGARDLESS of how feasible or how desirable Sayles and Chapple's concept of management and method of organization design might or might not be, many of their ideas throughout the book are unusually provocative. The reader finds himself pursuing one line of speculation after another. He might, for instance, wonder what sort of new interactions within a work group would be caused by the intrusion of an interaction observer.

That our knowledge of business lacks substance and systematics echoes the thesis of the now apocryphal "Gordon Study" and "Pierson Report" on business education. In taking off from this point, then, Sayles and Chapple are swimming with the current. Their proposal might almost be a direct response to the summary criticism of Robert D. Calkins in "The Problems of Business Education" (*The Journal of Business*, January 1961):

"Business education is a relatively new field. Two basic weaknesses have existed: the substance of the field has been too descriptive, while many of the generalizations and principles have been too sweeping. Much of the subject consists in the use of knowledge from other disciplines. The earlier notion that general principles could be developed, as in law, from the study of cases, is now largely abandoned, and cases are valued now more as aids in the exercise of the skills required in business.

"Whether a well-integrated body of principles can be developed is far from clear, but if significant headway is made in this direction greater attention must be given to the conditions and circumstances to which

they apply. If business judgment is to rest on anything more than intuition and homely maxims, it must have available much more systematic knowledge helpful in the anticipation of consequences of possible action. To that end a great deal more research of a systematic sort is needed. Though business is now more willing to welcome the research analyst than it was formerly, its wealth of experience is still only partially open to examination. More of it could be made available if business schools were organized and qualified to make use of this experience, without jeopardizing the co-operating companies." (p. 9)

In another fashion, this criticism has also been leveled against business educators and theorists by the practicing manager. Strangely enough, his resistance to meaningless generalities and artificial gimmicks—his insistence on the concrete and the unambiguous—has been characterized sometimes as old-fashioned and sometimes as scientific or tough-minded. (Where resistance is simply rigidity, the matter becomes more complicated.)

As for the controversy over which should come first in research priority, choice or action, Herbert Simon et al. would naturally maintain that the former should take precedence. Sayles and Chapple, however, make a telling point when they insist that before one can truly assess alternatives, he must have some reliable means of assessing effects. They offer, of course, what they consider to be improved methods of predicting organizational effects. And in their scheme of things, this would be putting first things first. They could even extend this to the view that mastering this step would aid in assessing the larger imponderables that depend on social and political interaction outside the organization. (They do, in fact, re-

McGraw-Hill books

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The Issues and a Program

By **DAN THROOP SMITH**, Harvard University.

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INTRODUCTION TO STATISTICS FOR BUSINESS DECISIONS

By **ROBERT SCHLAIFER**, Harvard University.

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An abridged and less mathematical version of Schlaifer's brilliant and pioneering text **PROBABILITY AND STATISTICS FOR BUSINESS DECISIONS**. The primary objective of this text is to set forth as simply as possible the basic principles of the classical decision theory of Neyman and Pearson and show how this theory is completed rather than contradicted by recent developments based on the concepts of utility and personal probability.

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MANAGEMENT IN MARKETING

By **HECTOR LAZO** and **ARNOLD CORBIN**, New York University. **688 pages, \$8.50.**

This book deals with the application of such basic managerial concepts as planning, organization, control, and integration within the substantive field of marketing and its major functional areas: marketing research, product planning, sales, advertising, traffic and inventory management, physical distribution. The subject is approached from the manager's point of view.

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mark that before management attempts to predict ten years ahead, it should develop the techniques for accurately predicting what the organization will do tomorrow.)

We are reminded here of an article by Bertrand de Jouvenel entitled "The Pseudo-Alcibiades: A Dialogue on Political Action and Responsibility" (*The Yale Review*, Winter 1961). This is a sequel (says the author) to Plato's *Alcibiades*—a warning of Wisdom to Ambition—and is meant as the Politician's later retort (to Wisdom):

"S[ocrates]: So the understanding of Politics is to be the understanding of what happens, a dynamic process, and not the understanding of the proper end to be sought! Surely it is far better to know what Politics is for than to know what it is like. Nonetheless there is something to be said for the understanding of Politics as process. Exclusive emphasis on what it is for tends to make it forgetful of its infidelity to its end. Emphasis upon what it is like makes us sharply aware that the process needs an influx of moral inspiration. The more matter of fact the science of Politics, the more urgent the call for Moral Philosophy." (p. 171)

This intrusion of moral questions when one is faced with alternatives, with the balance of interests—or responsibilities—in the transacting of daily affairs, is the import of Sayles and Chapple's reference to Barnard. The interrelation of morality and action is, of course, the characteristic line of Aristotle, who has a special definition of choice as action (if not observable action). We would predict that as the organization man casts about for moral guides, he will find more and more of interest in Aristotle and Confucius, both men with considerable experience and acumen in political affairs. We make this

prediction despite the increasing popularity of existentialism (for example, John H. Rice's "Existentialism for the Businessman" in *Harvard Business Review*, March-April, 1960) and Zen. Each of these admittedly has something to relieve the moral dilemma: existentialism does reaffirm man's truly humanizing responsibility for his own choices and in so doing sensitizes him to the choosing process; Zen also heightens his awareness of his humanity—in an age when he might be tempted to blur the distinction between himself and a machine—by placing him in relationship with nature, by disciplining him to a new concept of the physical universe that does not oppose him to nature but includes him as a part of the system. (Incidentally, this organic ap-

proach, which is also the burden of the ecologist's lesson and the *raison d'être* of the anthropologist's study of culture, is reflected in Sayles and Chapple. As for Arthur Koestler's debunking of Eastern spirituality in *The Lotus and the Robot*, Alan Watts has an impassioned and convincing rebuttal in this April's *Esquire*.) Both existentialism and Zen, however, are primarily personal codes and are as much centered on understanding and intention—in contrast to action—as the Judeo-Christian codes indicted by Barnard. A good case could be made—and has been—for the presence of strong socially-oriented strains in all of these codes. And their chief moral legacy, the worth and dignity of the human being, is quite basic. Perhaps business in its search for a moral

PEOPLE WILL BE TALKING ABOUT

RECENT

Dean Acheson, SKETCHES FROM LIFE — OF MEN I HAVE KNOWN (Harper)

Kingsley Amis, TAKE A GIRL LIKE YOU (Harcourt)

Hannah Arendt, BETWEEN PAST AND FUTURE (Politics; Viking)

James Baldwin, NOBODY KNOWS MY NAME (Outstanding Negro author; Dial)

Richard Bankowsky, AFTER PENTECOST (Vaunted new novel; Random)

Hillel Black, BUY NOW, PAY LATER (Morrow)

David Bolt, ADAM (Retelling of Bible story; John Day)

Roger Burlingame, DON'T LET THEM SCARE YOU: THE LIFE AND TIMES OF ELMER DAVIS (Lippincott)

Mark Caine, THE S-MAN: A GRAMMAR OF SUCCESS (Not so good as Potter, but good; Houghton)

C. P. Cavafy, THE COMPLETE POEMS

OF CAVAFY (New poetic star; Harcourt)

John Cheever, SOME PEOPLE, PLACES AND THINGS THAT WILL NOT APPEAR IN MY NEXT NOVEL (*New Yorker* favorite; Harper)

Lloyd W. Daley (ed.), AESOP WITHOUT MORALS (Orig. Aesop; Barnes)

Ralph Flanders, SENATOR FROM VERMONT (Autobiog.; Little, Brown)

Morris Freedman, CONFESSIONS OF A CONFORMIST (Norton)

Richard Lloyd George, MY FATHER, LLOYD GEORGE (Crown)

Robert Goulet, THE VIOLENT SEASON (Praised by Robert Graves; Braziller)

Poul Hoffmann, THE BURNING BUSH (Vol. 1 of trilogy on Moses; Muhlenberg)

Paul Horgan, CITIZEN OF NEW SALEM (Young Lincoln; Farrar)

William J. Lederer, A NATION OF SHEEP (Co-author of *The Ugly American*; Norton)

philosophy consonant with its problems in making decisions can combine the best of both worlds.

Reconsidering Sayles and Chapple's book as a whole, we find an undeniable fascination in their vision of the future organization as a synchronized performance, resembling a patterned dance in which tempo and interpretation might vary, but in which an inharmonious figure would be immediately apparent to the skilled director.

THE TIME eventually arrives when we must either pass along or discard the miscellaneous notes that we continually make on periodical literature, information services, and the like. In sorting through our current accumulation we were unwilling to discard the following:

Prentice-Hall has launched what they call a "new kind of Management Letter" entitled "The Prentice-Hall Top Management Report." A biweekly, it costs \$2.50 a month. The promotion literature describes it as a practical how-to guide to successful profit-making. "It will not cover 'the general economic picture'—it will not discuss the 'international situation'—it will not try to 'foresee coming events in Washington.'"

Similarly, McGraw-Hill as a publisher specializes in what it terms "shirt-sleeves management"—particularly in books written by managers for managers. Their latest such publication is *Top Management Handbook*, edited by H. B. Maynard (\$17.50). A massive and comprehensive book, its more than 1,200

pages include chapters written by 60 leading executives on the managing function, management by objectives, managing people, measurement and control, planning, functional managing, and the more general responsibilities of top management.

Fortune magazine is undertaking a new annual business directory, *Fortune Plant and Product Directory*, which it is offering at a special limited-edition price of \$75 for the first annual edition. The directory covers the 500 largest U. S. industrials, giving each plant's street address (including all branches), full product line with U. S. Government sic five-digit codes, financial information, and employment figures. It is arranged in three sections: alphabetical, geographical, and according to product.

M. B. Longman, *THE POWER OF BLACK* (On oil empire; Globus)
Gavin Maxwell, *A RING OF BRIGHT WATER* (Highly rated animal story; Dutton)
William Maxwell, *THE CHATEAU* (Knopf)
James A. Michener, *REPORT OF THE COUNTY CHAIRMAN* (On politics; Random)
Derek Monsey, *THE HERO* (Well-received new novel; Knopf)
Iris Murdoch, *A SEVERED HEAD* (One of today's best on central anthro. myth; Viking)
Edwin O'Connor, *THE EDGE OF SADNESS* (Little, Brown)
John O'Hara, *SERMONS AND SODA-WATER* (Vintage O'Hara; Random)
John Osborne, *THE WORLD OF PAUL SLICKEY* (Controv. new comedy by author of *The Entertainer*; Criterion)
Alan Paton, *TALES FROM A TROUBLED LAND* (Author of *Cry, the Beloved Country*; Scribner)

Joseph H. Peck, M. D., *LIFE WITH WOMEN—AND HOW TO SURVIVE IT* (Prentice)
St.-John Perse, *CHRONIQUE* (Poem in Fr. and Eng., trans. by Robert Fitzgerald; Pantheon)
George Plimpton, *OUT OF MY LEAGUE* (Offbeat sports story; Harper)
J. H. Plumb, *SIR ROBERT WALPOLE, THE KING'S MINISTER* (Vol. 2 of trilogy; Houghton)
Ayn Rand, *FOR THE NEW INTELLECTUAL* (Phil. by author of *Atlas Shrugged*; Random)
Frederic Raphael, *THE LIMITS OF LOVE* (Recommended new novel; Lippincott)
Emmanuel Royidis, *POPE JOAN* (Trans. by Lawrence Durrell; Dutton)
Ignazio Silone, *THE FOX AND THE CAMELLIAS* (Harper)
Claude Simon, *THE FLANDERS ROAD* (Famous Fr. novelist; Braziller)
Robert L. Taylor, *A JOURNEY TO MATECUMBE* (Author of *Travels of Jaimie McPheeters*; McGraw)

James Thurber, *LANTERNS AND LANCES* (Harper)
Martin Walser, *MARRIAGE IN PHILIPPSBURG* (Awarded Hermann Hesse Prize in Ger.; New Directions)
Joan Williams, *THE MORNING AND THE EVENING* (Protégée of Faulkner; Atheneum)

FORTHCOMING

Ian Brook, *JIMMY RIDDLE* (Heralded novel; Putnam)
Kenneth Burke, *THE RHETORIC OF RELIGION* (Noted critic and phil.; Beacon)
Natalie H. Cabot, *YOU CAN'T COUNT ON DYING* (Research on older people; Houghton)
Yashar Kemal, *MEMED, MY HAWK* (Touted new novel; Pantheon)
John Steinbeck, *THE WINTER OF OUR DISCONTENT* (Viking)
Leon Uris, *MILA 18* (Author of *Exodus*; Doubleday)
George Waller, *KIDNAP* (Lindbergh story; Dial)

While mentioning directories, we should note the publications of B. Klein and Company (27 East 22 Street, New York 10). These include, among others, a *Guide to American Directories for Compiling Mailing Lists* (\$15), a *Mail Order Business Directory* (\$15), a *Directory of Mailing List Houses* (\$10), an *International Telephone Directory* (2 vols., \$25), and an *Encyclopedia of American Associations* (\$20). The Gale Research Company (34th Floor, Book Tower, Detroit 26) also lists some useful directories: *Directory of*

University Research Bureaus and Institutes (\$20), *Encyclopedia of American Associations* (also a geographic index for this, \$20 and \$15), and an *Acronyms Dictionary* (\$10), a guide to alphabetic designations for associations, international organizations, government agencies, business firms, military terms, aerospace and electronic terms, and so on (for example, DEW, OGPU, UNICEF, MUTT, ECHO, RAMAC).

Special Libraries Association (31 E. Tenth Street, New York 3) has published *A Checklist for the Organization, Operation and*

Evaluation of a Company Library. It was compiled by Eva Lou Fisher, formerly Chief Librarian, Missiles and Space Division, Lockheed Aircraft Corporation, and sells for \$2. It covers general problems of what materials and services to purchase, specific problems of handling the materials and operating the services, and a basic minimum plan with outlines for further development.

Recently our attention was called to *Data Processing Digest*, which has been in publication about six years (1140 S. Robertson Blvd., Los Angeles 35) at \$24 for one year's subscription. In addition to digests of articles on data processing, reading lists are offered, national and international meetings are announced, and training programs described.

Into the general category of digests falls the recently announced Investors Intelligence, Inc., which offers a condensation of \$4,000 worth of market services and investment letters for \$48 a year. The address is 2 East Avenue, Larchmont, N. Y.

The Information Committee of the Committee for Economic Development under the chairmanship of Gardner Cowles is publicizing a new variation of the book club, "The CED Reader Forum." For \$15 a year the subscriber will receive ten or more CED publications and a quarterly called *Economic Developments*. For additional information, write the CED, 711 Fifth Avenue, New York 22.

When we mentioned book clubs in a previous issue, we omitted a relatively new one—the Kiplinger Book Club (1729 H Street, N.W., Washington 6). Like other such clubs, it requires members to purchase at least four selections a year at below-book-

INTERNATIONAL BUSINESS

ASPECTS OF EAST-WEST TRADE (A.M.A.)

Emile Benoit, EUROPE AT SIXES AND SEVENS (Columbia)

Gerda Blau, INTERNATIONAL COM-MODITY PROBLEMS (Taplinger)

George D. Bryson, AMERICAN MAN-AGEMENT ABROAD: A HANDBOOK FOR THE BUSINESS EXECUTIVE OVERSEAS (Harper)

Roberto Campos, DEVELOPMENT OF LATIN AMERICAN ECONOMIC INTE-GRATION (Taplinger)

S. Gethryn Davies (ed.), CENTRAL BANKING IN SOUTH AND EAST ASIA (Hong Kong U. Pr.)

Frank M. Dunbaugh, MARKETING IN LATIN AMERICA (Printers' Ink Book Co.)

The Economist, THE COMMON-WEALTH AND EUROPE (Internat'l Pubs.)

W. G. Friedmann and G. Kalmanoff (eds.), JOINT INTERNATIONAL BUSI-NESS VENTURES (Columbia)

Bernard Goodman, INDUSTRIAL MA-TERIALS IN CANADIAN-AMERICAN RELATIONS (Wayne State)

Robert S. Kane, AFRICA A TO Z: A GUIDE FOR TRAVELERS — ARM-CHAIR AND ACTUAL (Doubleday)

Hendrik Kraemer, WORLD CULTURES AND WORLD RELIGIONS (West-minster Pr.)

De Escobar Martinez, HOW TO DO BUSINESS IN MEXICO (Exposition Pr.)

Prafull K. Mukherjee, ECONOMIC SURVEYS IN UNDER - DEVELOPED COUNTRIES (Taplinger)

George P. Murdock (ed.), SOCIAL STRUCTURE IN SOUTHEAST ASIA (Quadrangle Books)

Ragnar Nurkse, DOMESTIC BALANCE, INTERNATIONAL EQUILIBRIUM, AND GROWTH IN THE WORLD ECONOMY (Harvard)

Robert L. Reynolds, EUROPE EMERGES: TRANSITION TOWARD AN INDUSTRIAL WORLD-WIDE SOCIETY (Wis.)

RIGHTS OF BUSINESSMEN ABROAD UN-DER TRADE AGREEMENTS AND COM-MERCIAL TREATIES (U. S. Council of Internat'l Chamber of Com-merce, 103 Park Ave., N. Y. 17)

V. B. Singh and A. K. Saran (eds.), INDUSTRIAL LABOUR IN INDIA (Taplinger)

C. Southworth and W. W. Buchan-an, CHANGES IN TRADE RESTRIC-TIONS BETWEEN CANADA AND THE UNITED STATES (Nat'l Planning Ass'n)

UNESCO, BASIC FACTS AND FIGURES (Educ., culture, & mass commun.; Columbia)

Elmer Wheeler, TESTED SELLING TIPS FROM AROUND THE WORLD (Prentice)

store prices and offers as a bonus the monthly *Kiplinger Book Letter*. Typical past offerings were Dexter Keezer's *New Forces in American Business*, Peter Drucker's *Landmarks of Tomorrow*, Louis Koenig's *The Invisible Presidency*, Allen Drury's *Advise and Consent*, Adolf Berle's *Power Without Property*, Martin Mayer's *Wall Street: Men and Money*, Parkinson's *The Law and the Profits*, and Baumer and Hersberg's *Politics Is Your Business*.

Two new book clubs are The Contemporary Affairs Society (996 National Press Bldg., Washington 4), which will distribute "important new books now being published in this country and abroad in the field of world affairs," and The Military Book Club (54 King Ave., Weehawken, N. J.), which will handle books within the scope of military history and practice from ancient times to the present.

Among the relatively new periodicals (1959 and 1960) are *Intercom*, another digest, this one on world affairs published by World Affairs Center (Carnegie Endowment, UN Plaza, 47th Street, New York 17); *Spectrum*, on science as it affects society today (this is one of the new book-magazines and is published by Holt); *Current*, a monthly reporting on "significant new material on the frontier social problems of today" (177 East 71st Street, New York 21); *Atlas*, "The International Magazine" that is Time-Life's latest venture and consists of reprints—in English—of articles from foreign publications (2120 Time & Life Bldg., Rockefeller Center, New York 20); *Midway*, a quarterly published by the University of Chicago Press and advertised as the magazine "for the armchair scholar" and a "magazine of discovery in the arts and

sciences," which consists of articles from the University's scholarly journals and the Press's books rewritten in non-technical language; a new London publication, *China Quarterly*, sponsored by the same organization as *Encounter* and *Soviet Survey*, providing "impartial analysis and documentation of current events in China" (1-2 Langham Place, London, W.1); two other University of Chicago publications, *Economic Development and Cultural Change* and *Conflict Resolution*; *Current Thought on Peace and War*, a quarterly digest of books, articles, and current research on international relations focusing on the problems of world order and conflict, published by The Institute for International Order (Room 1474, 11 West 42nd Street, New York 36); and (the successor to the *Art News Annual*) *Portfolio*, which will be published twice a year and is described as a "journal of the humanities" that will not popularize or digest but is directed to the same kind of audience that supported the old *Vanity Fair*. (We wonder, incidentally, what happened to the Albert Skira-Salvador Dali venture called *Rhinoceros* that was to "unite most important currents of thought" in the Western world. We have not been able to locate a copy.)

The near-recent deluxe book-magazine *Horizon* (whose only current rival for opulence is the French *Réalités*), incidentally, has announced for fall publication *The Horizon Book of the Renaissance*, which, they stress, is not an "art book," but a comprehensive "word-and-picture chronicle of Renaissance life: political, cultural, economic, and social."

A new entry in the book-magazine field that is even larger than *Horizon* or *American Heritage* is

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Presents the basic principles and methods of training and instruction for use in business and industrial training programs. 482 pages. \$9.35

•CONCEPTUAL FOUNDATIONS OF BUSINESS

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The American Gun, a luxury quarterly for sportsmen and gun enthusiasts.

Earlier, we mentioned the quarterly that is a revitalization of the Proceedings of the American Academy of Arts and Sciences, *Daedalus*. There can be little doubt that it lives up to its claim to be "a unique forum of ideas for the intellectual community as a whole." Issues to date have included *Science and the Modern World View*, *The American National Style*, *Symbolism in Religion and Literature*, *On Evidence and Inference*, *Education in the Age of Science*, *Myth and Myth-making*, *Current Work and Controversies*, *Quantity and Quality*, *The Visual Arts Today*, *Mass Culture and Mass Media*, *The Russian Intelligentsia*, *The Future Metropolis*, and *Arms Control*. Although these titles can give some idea of the breadth of subject, they give no indication of the excellence of the coverage of each or of the stature of the contributors. They are in the highest tradition of the Academy; they make most of the other symposia seem trivial.

The current compulsive need to know at least something about more and more obtrudes nowhere as much as in the responding parade of symposia, compendia, and massive surveys that seem to come faster with each passing month. The University of Michigan some time ago embarked on a prodigious publishing program called "History of the Modern World Program." Of the projected fifteen volumes, the following are available: *Russia and The Soviet Union* by Warren B. Walsh, Professor of Russian History and Chairman of the Board of Russian Studies at Syracuse University; *Latin America* by J. Fred Rippy, Professor of History

at the University of Chicago; *Italy* by Denis Mack Smith, Lecturer in History at Cambridge University; *The Far East* by Nathaniel Peffer, Professor of International Relations at Columbia University; *The Near East* by William Yale, Professor at Boston University and Near East consultant to the Department of State and the United Nations; *France* by Albert Guerard, Professor Emeritus of General and Comparative Literature at Stanford University; and *The United States* (2 vols.) by Michael Kraus, Professor of History at City College, New York (Vol. I), and Foster Rhea Dulles, Professor of History at The Ohio State University (Vol. II). The remaining seven volumes will cover Africa, Australia and the Southwest Pacific, Canada, Great Britain, Spain and Portugal, India, and Germany. The series is under the general editorship of Professor Allan Nevins of Columbia University and Professor Howard Ehrmann of the University of Michigan.

Two commercial firms are also coming out with new history series. Hill & Wang is embarking on a series called "The Making of America," a six-volume history—interpretative rather than merely factual, they say—under the general editorship of David Donald. The first two titles were published this spring: *The New Nation, 1800-1845* by Charles M. Wiltse and *The Stakes of Power, 1845-1877* by Roy F. Nichols. Doubleday, flushed with the success of their "Mainstream of America" series, is launching a successor called "Mainstream of the Modern World" under the editorship of John Gunther. The series will cover world history since 1492. The first volume pub-

lished in April was *The Age of Reason* by Sir Harold Nicolson.

Both a survey and a reader aimed at the burgeoning adult education field is *An Outline of Man's Knowledge of the Modern World* (McGraw-Hill, \$7.50) edited by the late Lyman Bryson of Columbia University's Teachers College. The authors of the various articles in the book are first-rate and the subjects indeed span a wide area of man's knowledge—with one qualification: the emphasis is on the Western tradition and, in particular, the United States.

An interesting experiment in "geohistory" has been undertaken by the editors of *Newsweek* in cooperation with the Hammond Map Company. Entitled *The Five Worlds of Our Lives* (\$9.95 prepublication price), it promises to vivify for the reader "the swashbuckling World of Imperialism," "the hope-filled World of Idealism and Upheaval," "the steel-fisted World of Dictators," "the volcanic World of Nationalism," and "the breath-taking World of Space."

Due out this fall is a new atlas jointly edited by *Life* and Rand McNally (published by the latter) called *The Life Pictorial Atlas of the World*, which has created quite a prepublication stir. Nelson is publishing a series of historical atlases originally issued in Europe and praised for the wealth of photographic documentation in addition to unusually fine maps. The first to appear here was *Atlas of the Classical World* (reportedly the least successful of the group) by A.A.A. van der Heyden and H. H. Scullard. The others include *Atlas of Western Civilization* by F. van der Meer, *Atlas of the Bible* by R. P. L. H. Grollenberg, and *Atlas of the Early Christian World* by

F. van der Meer and M. Christine Mehrmann.

One of the better received compendia within the last year was Simon and Schuster's ambitious *The World of Mathematics* (deluxe \$25, paperback \$8.95 for 4 vols.) edited by James R. Newman of *Scientific American*. Not only a comprehensive history of mathematical ideas, it is wonderfully literate reading. Both its liveliness and its scholarship have won it kudos.

Another scientific collection praised by the critics and reviewers was the University of Chicago's centennial publication, *Evolution After Darwin* (\$25 per set of 3 vols.) edited by Sol Tax, Professor of Anthropology at the University of Chicago. The individual volumes are *The Evolution of Life: Its Origin, History, and Future* (\$10), *The Evolution of Man: Mind, Culture, and Society* (\$10), and *Issues in Evolution* (\$7.50). The contributing authors include some fifty scientists in fields ranging from astronomy to microbiology, from archeology to psychiatry, who write from the viewpoint of their specialties, forming in aggregate what *Scientific American* called "an admirable course in contemporary thought."

Last April, Oxford published its one-volume *A Short History of Technology: From Earliest Times to A.D. 1900* by T. K. Derry and Trevor I. Williams, which includes considerable historical background.

The past year also saw the publication of the first volume in the monumental 15-volume *Encyclopedia of World Art* (\$32 per volume) edited by The Institute for Cultural Collaboration in Italy and published by McGraw-Hill. Favorably received by art critics here, it has been especially com-

mended for the quality of the color reproduction. New American Library and Harry Abrams, art publisher, have also projected a comprehensive art series called "The Mentor History of World Art," each volume of which will be individually authored or edited by outstanding U.S. art authorities and scholars.

In addition to the recent flowering of comprehensive multi-volume studies and symposia, there has been a recrudescence of "good reading guides." Besides the perennial Great Books program initiated by the University of Chicago and *Good Reading* ("your guide to 2,000 of the world's best books") prepared by The Committee on College Reading and edited by J. Sherwood Weber (R. R. Bowker, \$4; paperback, New American Library, \$.75), two new entries of the genre gained popularity during

the year: Clifton Fadiman's *The Lifetime Reading Plan* (World, \$3.75) and Bernard Berenson's *One Year's Reading for Fun* (Knopf, \$5). Fadiman's guide to 100 books and authors from Homer to Hemingway has been praised for the author's comments and especially the bibliography. Unfortunately, Fadiman exists in that no man's land of what Granville Hicks calls the "middleman of culture"—scorned by the learned for what they feel is a watering down of cultural content in order to pander to and profit from the new status seekers. Any program of planned reading to the more knowledgeable, of course, would be blood kin to joining the Book-of-the-Month Club or subscribing to *Readers' Digest*. But then, such programs are designed for the cultural newcomers, for no matter what motives, and for these,

FOR THE BUSINESS EXECUTIVE

Carroll C. Arnold, *SPEAKER'S RESOURCE BOOK* (Foresman)

Arthur J. Benis, *EXECUTIVE RECRUITING* (Exec. Reports Associates, Box 375, Lake Forest, Ill.)

James M. Black, *ASSIGNMENT MANAGEMENT: A GUIDE TO EXECUTIVE COMMAND* (Prentice)

Walter Buckingham, *AUTOMATION: ITS IMPACT ON BUSINESS AND PEOPLE* (Harper)

George N. Daffern, *MANAGEMENT DEVELOPMENT IN A CHANGING WORLD* (Simmons)

DATA PROCESSING TODAY: A PROGRESS REPORT (A.M.A.)

John T. Dunlop (ed.), *POTENTIALS OF THE AMERICAN ECONOMY* (Harvard)

Editors of *Wall Street Journal*, *THE NEW MILLIONAIRES AND HOW THEY MADE THEIR FORTUNES* (Bernard Geis)

Richard Eells and Clarence Walton, *CONCEPTUAL FOUNDATIONS OF BUSINESS* (Irwin)

Dan H. Fenn (ed.), *MANAGING AMERICA'S ECONOMIC EXPLOSION* (McGraw)

Martin R. Gainsbrugh (ed.), *AMERICAN ENTERPRISE: THE NEXT TEN YEARS* (Macmillan)

H. W. Garriel, *TECHNIQUES OF CREATIVE THINKING FOR MANAGEMENT* (Prentice)

J. D. Glover and P. R. Lawrence, *A CASE STUDY OF HIGH LEVEL ADMINISTRATION IN A LARGE ORGANIZATION* (Off. of Ass't Sec'y of Air Force, 1947-1952; Grad. Sch. of Bus. Admin., Harvard)

C. T. Hardwick and B. F. Landuyt, *ADMINISTRATIVE STRATEGY* (Simmons)

Harry W. Hepner, *PERCEPTIVE MANAGEMENT AND SUPERVISION* (Prentice)

George C. Houston, *NEW HORIZONS*

Fadiman's mission and method in this guide are admirable. More to the taste of the cultural sophisticated certainly is Berenson's delightful eclectic tour through history, biography, philosophy, esthetics, travel books, and literature. A British contribution is the new Penguin issue of *The Readers' Guide*, edited by Sir William E. Williams. It received an above-average press for the genre.

There is probably a handful (comparatively speaking, of course) of books each year that seem to catch fire because they are both good and well-timed. Among such for the past year were the following nonfiction titles: Paul Goodman's *Growing Up Absurd* (Random), C. P. Snow's *The Two Cultures and the Scientific Revolution* (Cambridge), Isaac Asimov's *The Intelligent Man's Guide to Science* (Basic Books), Marston Bates's

The Forest and the Sea (Random), E. H. J. Gombrich's *Art and Illusion* (Pantheon), Robert J. Heilbroner's *The Future as History* (Harper), Loren Eiseley's *The Firmament of Time* (Atheneum), reissue of James Agee and Walker Evans' *Let Us Now Praise Famous Men* (Houghton), W. W. Rostow's *The Stages of Economic Growth* (Cambridge), William Shirer's *The Rise and Fall of the Third Reich* (S. & S.), C. Northcote Parkinson's *The Law and the Profits* (Houghton), Nikos Kazantzakis' *The Last Temptation of Christ* (S. & S.), and Richard Neustadt's *Presidential Power* (Wiley); and the following fiction: Giuseppe di Lampedusa's *The Leopard* (Pantheon), Andre Schwarz-Bart's *The Last of the Just* (Atheneum), and anything by Lawrence Durrell or C. P. Snow. (Remember when Cozzens was the rage?)

FOR MANAGER DEVELOPMENT (Irwin)

William T. Jerome, EXECUTIVE CONTROL: THE CATALYST (Wiley)

Charles F. Kettering, PROPHET OF PROGRESS (Dutton)

LOOKING AHEAD IN LABOR RELATIONS (A.M.A.)

Thomas A. Mahoney, BUILDING THE EXECUTIVE TEAM (Prentice)

Paul W. Maloney, MANAGEMENT'S TALENT SEARCH: RECRUITING PROFESSIONAL PERSONNEL (A.M.A.)

Charles W. Merrifield (ed.), LEADERSHIP IN VOLUNTARY ENTERPRISE (Oceana)

L. Petrullo and B. M. Bass (eds.), LEADERSHIP AND INTERPERSONAL BEHAVIOR (Holt)

Goronwy Rees, THE MULTIMILLIONAIRES (Macmillan)

George B. Richardson, INFORMATION AND INVESTMENT: A STUDY IN THE WORKING OF THE COMPETITIVE ECONOMY (Oxford)

John W. Riegel, EXECUTIVE DEVELOPMENT (Mich.)

Oscar N. Serbein, EDUCATIONAL ACTIVITIES OF BUSINESS (Amer. Council on Educ., 1785 Mass. Ave., N.W., Wash. 6, D.C.)

Sumner H. Slichter, POTENTIALS OF THE AMERICAN ECONOMY: ESSAYS (Harvard)

John D. Staley, THE COST-MINDED MANAGER (A.M.A.)

Perrin Stryker, THE CHARACTER OF THE EXECUTIVE (Harper)

Harleigh B. Trecker, NEW UNDERSTANDINGS OF ADMINISTRATION (Association Pr.)

EXECUTIVE HEALTH

Donald A. Laird, TIRED FEELINGS AND HOW TO MASTER THEM (McGraw)

Harry Swartz, M.D., HOW TO MASTER YOUR ALLERGY (Thomas Nelson)

BOOKS RECEIVED

Albers, Henry H. *Organized Executive Action: Decision-Making, Communication, and Leadership*. John Wiley & Sons, Inc., New York, 1961. \$8.50.

Baumol, William J. *Economic Theory and Operations Analysis*. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961. \$9.00.

Brown, Wilfred. *Exploration in Management*. John Wiley & Sons, New York, 1961. \$6.00.

Buckingham, Walter. *Automation: Its Impact on Business and People*. Harper & Brothers, New York, 1961. \$4.50.

Canfield, Bertrand. *Sales Administration: Principles & Problems*. (4th ed.) Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961. \$7.95.

Carter, W. Harrison, and Snaveley, William P. *Intermediate Economic Analysis*. McGraw-Hill Book Co., Inc., New York, 1961. \$6.95.

Chapple, Eliot D., and Sayles, Leonard R. *The Measure of Management*. The Macmillan Co., New York, 1961. \$6.50.

Copeland, Morris A. *Trends in Government Financing*. Princeton University Press, Princeton, N.J., 1961. \$5.00.

Dahlberg, Arthur. *Money in Motion*. John de Graff, Inc., New York, 1961. \$5.95.

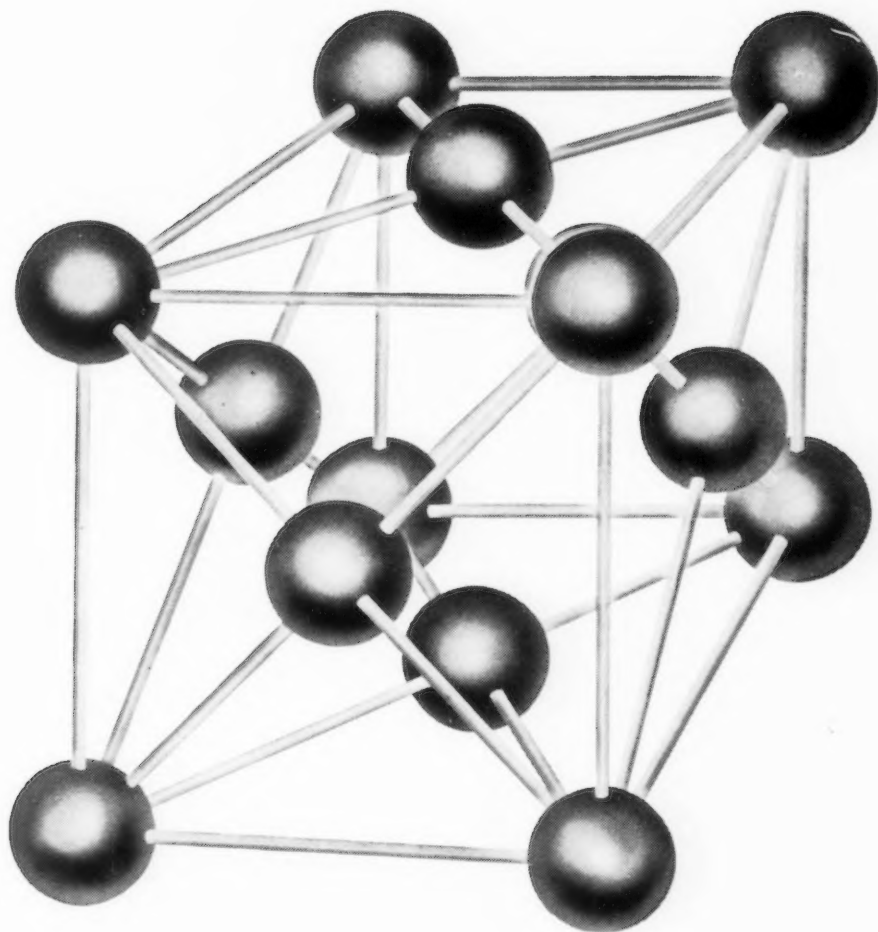
De Camp, L. Sprague. *The Heroic Age of American Invention*. Doubleday & Company, Inc., Garden City, N.Y., 1961. \$4.50.

Department of Economic and Social Affairs. *Patterns of Industrial Growth 1938-1958*. Columbia University Press, New York, 1960. \$8.50.

Entenberg, Robert David. *The Changing Competitive Position of Department Stores in the United States by Merchan-*

- dise Lines.* (Revised Edition) University of Pittsburgh Press, Pittsburgh, Pa., 1961. \$6.95.
- Famularo, Joseph J. *Supervisors in Action.* McGraw-Hill Book Co., Inc., New York, 1961. \$4.75.
- Gasset, José Ortega y. *The Modern Theme.* Harper Torchbooks, The Academy Library, Harper & Brothers, New York, 1961. \$1.35 (paperback).
- Gentry, Dwight L., and Taff, Charles A. *Elements of Business Enterprise.* The Ronald Press Company, New York, 1961. \$7.00.
- Hanson, Kermit O., and Brabb, George J. *Managerial Statistics.* (2nd ed.) Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961. \$9.25.
- Hepner, Harry W. *Perceptive Management and Supervision.* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961. \$10.00.
- Hardwick, Clyde T., and Landuyt, Bernard F. *Administrative Strategy.* Simmons-Boardman Books, New York, 1961. \$7.50.
- Hickman, Bert G. *Growth and Stability of the Postwar Economy.* The Brookings Institution, Washington, D.C., 1960. \$6.00.
- Houle, Cyril O. *The Inquiring Mind.* University of Wisconsin Press, Madison, Wis., 1961. \$1.50 (paper) \$5.00 (cloth).
- Kaufman, Felix. *Electronic Data Processing and Auditing.* The Ronald Press Company, New York, 1961. \$6.00.
- Knopf, Kenyon A., and Stauss, James H., eds. *The Teaching of Elementary Economics.* Holt, Rinehart & Winston, Inc., New York, 1960. \$3.50.
- LeBreton, Preston P. and Henning, Dale A. *Planning Theory.* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961.
- Lemke, B. C., and Edwards, James Don, eds. *Administrative Control and Executive Action.* Charles E. Merrill Books Inc., Columbus, Ohio, 1961.
- Lewis, Edwin H. *Marketing Electrical Apparatus and Supplies.* McGraw-Hill Book Co., Inc., New York, 1961. \$9.00.
- Mahoney, Thomas A., Jerdee, Thomas H., and Nash, Allan N. *The Identification of Management Potential — A Research Approach to Management Development.* Wm. C. Brown Company, Publishers, Dubuque, Iowa, 1961. \$3.00.
- Mahoney, Thomas A. *Building the Executive Team: A Guide to Management Development.* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1961. \$7.95.
- Moore, Geoffrey H., ed. *Business Cycle Indicators.* Vol. I. Princeton University Press, Princeton, N.J., 1961. \$12.50.
- Moore, Geoffrey H., ed. *Business Cycle Indicators.* Vol. II. Princeton University Press, Princeton, N.J., 1961. \$4.50.
- National Bureau of Economic Research, New York. *Public Finances: Needs, Sources, and Utilization.* Princeton University Press, Princeton, N.J., 1961. \$10.00.
- Pratt, Parley M. *Rice: Domestic Consumption in the United States.* Bureau of Business Research, The University of Texas, Austin, Tex., 1960. \$4.00.
- Redfield, James E. *A Study of Management Services by Certified Public Accountants.* Bureau of Business Research, University of Texas, Austin, Tex., 1961. \$4.25.
- Revzan, David A. *Wholesaling in Marketing Organization.* John Wiley & Sons, Inc., New York, 1961. \$10.50.
- Rolph, Earl R., and Break, George F. *Public Finance.* The Ronald Press Company, New York, 1961. \$7.50.
- Salant, Walter S., and Vaccara, Beatrice N. *Import Liberalization and Employment.* The Brookings Institution, Washington, D.C., 1961. \$6.75.
- Schlaifer, Robert. *Introduction to Statistics for Business Decisions.* McGraw-Hill Book Co., Inc., New York, 1961. \$7.75.
- Schmeckebier, Laurence F. and Eastin, Roy B. *Government Publications and Their Use.* The Brookings Institution, Washington, D.C., 1961. \$6.00.
- Stryker, Perrin. *The Character of the Executive.* Harper Torchbooks, The Academy Library, Harper & Brothers, New York, 1960. \$1.60 (paperback).
- Thomassen, Henry. *Business Planning for Economic Stability.* Public Affairs Press, Washington, D.C., 1958. \$2.50.
- Wernette, John Philip. *Growth and Prosperity Without Inflation.* The Ronald Press Company, New York, 1961. \$3.75.
- Westing, J. H., and Fine, I. V. *Industrial Purchasing.* (2nd ed.) John Wiley & Sons, Inc., New York, 1961.
- Weston, J. Fred, ed. *Procurement and Profit Renegotiation.* Wadsworth Publishing Co., Inc., San Francisco, Calif., 1960.





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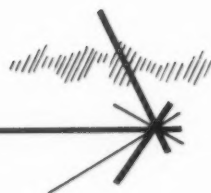
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